SUN VALLEY PARKWAY

SUN VALLEY PARKEWAY FIS FCD NO. 90-04
HYDROLOGY REPORT (1/24/91) AND FIS REPORT
(9/91, REVISED 10/10/91) BY A-N WEST, INC.
T.D.N. SECTIONS 3.5 AND 3.6 AND 4.7 AND 4.8
FINAL RESULTS ON HARD COPY AND DISKETTES

FRAGILE: DISKETTES ENCLOSED

APPENDIX A
100-YEAR FLOODPLAIN/FLOODWAY ANALYSIS
HEC-2 INPUT/OUTPUT
FLOOD INSURANCE STUDY
SUN VALLEY PARKWAY NORTH
MARICOPA COUNTY, ARIZONA

Prepared for:

Flood Control District of Maricopa County
3335 West Durango Street
Phoenix, Arizona 85009

September, 1991

Prepared by:

A-N WEST, INC.
7600 North 15th Street, Suite 200
Phoenix, Arizona 85020
(602)861-2200

FCD No. 90-04
A-N West, Inc. Job No. 7158-01

APPENDIX A

Table of Contents

HEC-2 Input/Output Hardcopy and Computer Input FIles - 100-Year Floodplain/Floodway Analysis.

Wash NO. 1 and Tributary	Computer Input File: Wash 1-7.DAT (Rev. 8/14/91)
Wash No. 2 and Tributary	Computer Input File: Wash 2-4.DAT (Rev. 8/14/91)
Wash No. 3 and Tributaries	Computer Input File: Wash 3-4.DAT (Rev. 8/15/91)
Wash No. 4 and Tributaries	Computer Input File: Wash 4-8.DAT (Rev. 8/12/91)
Wash No. 5 and Tributary	Computer Input File: Wash 5-2.DAT (Rev. 8/06/91)
Wash No. 6 and Tributary	Computer Input File: Wash 6-2.DAT (Rev. 8/05/91)
Wash No. 7	Computer Input File: Wash 7-1.DAT (Date 7/25/91)
Wash No. 8 and Tributaries	Computer Input File: Wash 8-2.DAT (Date 7/25/91)

Registered Professional Engineer (Civil)
Certificate No. 15290
GREGORY A. SCHUELKE
Date Signed 9/6/91
ARIZONA, U.S.A.

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1*****************************************
*  HEC-2 WATER SURFACE PROFILES          *
*                                        *
*  Version   4.6.0;  February 1991       *
*                                        *
*  RUN DATE    06MAY93    TIME   11:26:25 *
*****************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS          *
*  HYDROLOGIC ENGINEERING CENTER         *
*  609 SECOND STREET, SUITE D            *
*  DAVIS, CALIFORNIA 95616-4687          *
*          (916) 756-1104                *
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X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X            X     X
X     X  X        X                        X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX             XXXXXXX
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06MAY93 11:26:25 PAGE 1

THIS RUN EXECUTED 06MAY93 11:26:26

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

 Version   4.6.0;  February 1991
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T1      SUN VALLEY PARKWAY NORTH FIS.   CONTRACT:FEDMC NO.90-04    FILE:WASH1-7
T2      100-YEAR WATER SURFACE PROFILE                  A-N WEST INC, PHX, AZ.
T3      WASH NO. 1  100-YEAR PROFILE                   DATE:5\15\91;REV.8\14\91
```

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2		0	.004				1504.13	

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	43	1	2	26	39	21	22	37	28
55	54	0	33	13	14	15	55	26	56
63	1	31	4	40	57	9	38	39	32
3	10	11	12	5	7	8	16	17	18
0	200								

```
NC     .054      .054      .042        .1         .3
NT       2      2731      2731
ET                          9.1                                          10086.67    10186.4
        FLOODWAY MODEL WITH FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
        EQUAL CONVEYANCE REDUCTION (METHOD 4) FOR INITIAL ANALYSIS.
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE-AREA METHOD
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CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
CONFLUENCE WITH WASH 5 WEST ALONG BASELINE
CROSS-SECTIONS ARE COVED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.

X1	.0905	61	10133.4	10186.4						
GR	1507.9	9677.2	1507.4	9698.3	1507.1	9723.4	1506.8	9743.3	1506.0	9758.9
GR	1504.9	9782.8	1504.5	9815.9	1503.9	9839.4	1503.2	9856.0	1502.8	9866.1
GR	1501.3	9872.5	1502.4	9886.9	1502.8	9907.7	1503.0	9935.2	1503.3	9953.3
GR	1503.7	9975.7	1503.9	9995.3	1504.2	10006.0	1504.2	10000.1	1504.5	10021.2
GR	1504.4	10039.4	1504.2	10055.1	1503.7	10079.1	1502.7	10097.3	1502.0	10116.0
GR	1501.2	10133.4	1500.3	10147.1	1496.8	10155.3	1497.2	10173.3	1500.7	10179.5
GR	1501.5	10186.4	1499.8	10197.8	1502.4	10204.5	1502.8	10216.7	1503.6	10228.4

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GR	1505.2	10240.8	1506.8	10250.6	1507.2	10263.7	1506.7	10278.9	1506.2	10289.9
GR	1505.9	10304.1	1506.4	10316.4	1507.6	10324.4	1507.4	10338.8	1508.5	10361.0
GR	1509.1	10372.5	1509.2	10384.9	1509.7	10399.2	1509.9	10411.4	1510.5	10422.1
GR	1510.5	10437.5	1510.0	10451.2	1510.2	10465.4	1510.3	10479.2	1510.4	10495.0
GR	1510.8	10508.3	1511.1	10519.1	1511.5	10531.7	1512.1	10541.4	1512.6	10551.6
GR	1512.8	10551.7								

ET			9.1						9929.7	10016.6
X1	.2159	67	9929.7	10000	700	800	750			
GR	1511.9	9650.5	1511.2	9667.2	1510.5	9679.9	1509.0	9689.8	1509.2	9705.7
GR	1508.8	9722.9	1509.2	9739.4	1508.1	9752.6	1507.9	9759.3	1507.9	9770.9
GR	1507.2	9781.1	1507.5	9789.2	1507.2	9801.6	1507.1	9817.4	1506.2	9836.0
GR	1505.8	9847.3	1506.6	9855.9	1506.0	9867.3	1505.8	9877.8	1505.4	9889.7
GR	1505.1	9901.5	1505.2	9909.1	1505.0	9929.7	1503.8	9938.1	1499.1	9946.6
GR	1499.7	9960.7	1500.2	9972.0	1503.1	9976.1	1504.1	9991.1	1504.8	10000.0
GR	1504.8	10000.1	1505.2	10019.3	1506.1	10035.6	1506.1	10050.6	1506.0	10061.4
GR	1505.2	10070.9	1504.8	10077.9	1505.7	10091.7	1506.0	10105.0	1506.7	10120.5
GR	1506.8	10138.5	1506.1	10153.2	1506.1	10166.9	1506.4	10176.6	1505.5	10184.0
GR	1505.8	10197.2	1506.7	10207.6	1506.2	10214.6	1505.6	10222.1	1506.7	10237.5
GR	1507.1	10250.6	1508.2	10260.7	1508.4	10277.0	1508.1	10289.8	1508.2	10304.9
GR	1508.8	10320.0	1509.1	10334.3	1509.6	10352.8	1510.2	10370.7	1510.5	10387.4
GR	1510.6	10403.9	1510.9	10420.8	1511.2	10434.2	1511.5	10453.7	1511.7	10474.0
GR	1512.2	10489.5	1511.8	10500.9						

QT	2	2157	2157							
ET			9.1						9787.1	9908.5

CROSS-SECTION UPSTREAM OF CONFLUENCE WITH WASH NO.3, DECREASE DISCHARGE.

X1	.3589	55	9787.1	9908.5	850	775	850			
GR	1519.8	9591.0	1517.3	9611.8	1518.9	9633.8	1518.2	9652.3	1517.0	9679.0
GR	1516.6	9697.7	1516.0	9711.3	1514.6	9716.3	1513.7	9726.3	1512.3	9737.9
GR	1511.2	9749.0	1508.0	9763.2	1508.2	9774.2	1507.9	9787.1	1507.5	9801.1
GR	1507.2	9814.3	1504.9	9828.7	1502.4	9845.1	1501.8	9859.0	1502.2	9869.9
GR	1506.8	9877.7	1507.8	9893.4	1507.8	9908.5	1508.8	9925.3	1510.1	9942.6
GR	1510.3	9953.4	1510.3	9967.0	1511.4	9987.3	1512.0	10000.0	1512.0	10000.1
GR	1511.4	10023.6	1511.3	10037.7	1511.3	10051.1	1511.0	10063.2	1511.4	10073.4
GR	1511.2	10088.1	1511.2	10099.7	1511.5	10122.6	1512.2	10134.6	1512.3	10146.2
GR	1512.2	10161.1	1512.6	10177.4	1512.5	10194.2	1513.1	10209.9	1513.1	10224.5
GR	1513.4	10240.0	1513.6	10256.2	1514.1	10270.7	1514.4	10284.8	1515.5	10300.7
GR	1516.3	10314.8	1516.9	10330.1	1517.1	10344.5	1517.5	10357.7	1517.9	10361.3

ET			9.1						10000.0	10100.0
X1	.5028	60	10026.1	10057.6	750	800	900			
GR	1520.0	9480.7	1519.2	9507.4	1518.6	9540.8	1518.1	9560.2	1518.4	9582.4
GR	1518.0	9605.7	1517.2	9632.2	1516.9	9663.5	1516.4	9694.7	1516.9	9711.2
GR	1516.3	9732.9	1516.3	9756.9	1516.7	9786.1	1516.5	9806.7	1516.7	9827.4
GR	1516.9	9849.8	1518.0	9867.8	1517.7	9883.7	1516.6	9904.3	1516.6	9923.7
GR	1515.2	9942.6	1512.8	9962.0	1510.8	9982.1	1511.0	10000.0	1510.8	10000.1
GR	1510.8	10000.2	1511.1	10010.8	1510.2	10026.1	1505.3	10030.5	1505.3	10037.4
GR	1510.4	10044.1	1511.5	10057.6	1511.7	10073.4	1511.9	10086.2	1512.0	10101.0
GR	1512.3	10110.9	1512.2	10121.8	1511.7	10128.5	1512.7	10138.0	1512.1	10145.3

GR	1512.8	10150.7	1513.1	10169.1	1513.4	10179.7	1513.5	10191.1	1514.1	10205.0
GR	1514.0	10215.0	1514.7	10226.6	1514.0	10253.0	1514.1	10264.0	1514.0	10277.1
GR	1514.6	10290.6	1514.7	10303.4	1516.4	10320.3	1516.3	10336.0	1515.3	10350.6
GR	1515.8	10362.1	1516.8	10370.9	1517.4	10381.6	1518.2	10390.3	1518.8	10401.4

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ET			9.1						10110.0	10255.0
X1	.6363	94	10118.3	10147.1	740	900	980			
GR	1522.6	9866.2	1522.2	9897.4	1521.9	9903.9	1521.5	9912.0	1521.0	9923.7
GR	1521.0	9936.4	1520.7	9947.9	1519.8	9965.0	1518.8	9978.0	1518.6	9988.3
GR	1518.6	10000.0	1518.2	10000.1	1518.2	10000.2	1517.6	10021.7	1517.5	10039.8
GR	1516.6	10050.4	1515.9	10057.4	1516.0	10069.2	1516.1	10077.4	1515.7	10089.9
GR	1515.5	10101.5	1514.6	10110.9	1514.4	10118.3	1512.0	10127.9	1508.9	10132.6
GR	1508.4	10137.4	1513.9	10147.1	1515.2	10157.0	1515.9	10168.0	1516.1	10173.9
GR	1515.7	10182.4	1515.5	10189.5	1515.0	10198.0	1514.1	10202.9	1513.7	10209.0
GR	1514.6	10215.7	1514.9	10226.1	1514.9	10241.1	1514.6	10241.2	1514.6	10243.7
GR	1512.3	10248.3	1515.2	10251.6	1515.4	10259.2	1515.4	10265.9	1515.2	10271.7
GR	1515.5	10277.9	1515.7	10285.0	1516.3	10291.6	1517.0	10298.7	1516.6	10307.8
GR	1517.0	10319.6	1517.2	10331.0	1517.7	10343.9	1517.8	10358.2	1518.4	10369.0
GR	1517.5	10379.7	1517.5	10394.0	1517.3	10406.0	1516.6	10415.6	1516.9	10424.8
GR	1517.2	10435.9	1518.4	10446.4	1518.4	10461.1	1518.5	10473.3	1518.1	10483.9
GR	1517.7	10504.6	1518.1	10513.1	1518.3	10525.3	1518.7	10538.0	1518.9	10549.6
GR	1519.0	10562.2	1519.0	10574.7	1519.2	10591.2	1519.4	10608.8	1519.6	10624.7
GR	1520.2	10654.7	1520.4	10669.1	1520.6	10682.5	1520.1	10701.9	1520.2	10713.7
GR	1520.6	10725.7	1520.7	10737.2	1520.5	10748.7	1520.7	10754.8		

ET			9.1						9994.3	10059.7
X1	.7783	95	10000.1	10046.7	770	730	760			
GR	1530.1	9464.3	1530.1	9493.5	1530.1	9509.5	1529.8	9520.7	1529.9	9527.3
GR	1529.5	9545.8	1528.6	9564.0	1528.4	9574.6	1528.4	9587.9	1527.8	9601.4
GR	1529.2	9612.3	1528.7	9628.3	1529.3	9640.2	1529.8	9650.1	1529.8	9659.1
GR	1529.9	9669.7	1529.9	9682.7	1529.9	9696.0	1529.9	9709.6	1530.0	9723.5
GR	1529.9	9738.1	1529.9	9755.0	1528.4	9777.1	1528.1	9786.9	1527.5	9799.1
GR	1526.4	9806.7	1525.8	9814.9	1526.5	9827.7	1526.6	9837.5	1526.2	9862.5
GR	1526.2	9869.6	1526.5	9878.9	1526.7	9888.8	1526.7	9899.4	1525.9	9910.1
GR	1524.2	9920.0	1521.3	9931.9	1519.6	9940.4	1519.4	9952.4	1518.1	9962.6
GR	1518.7	9969.5	1518.3	9978.4	1518.1	9986.2	1517.9	9994.2	1518.1	10000.0
GR	1518.1	10000.1	1517.2	10009.8	1512.1	10016.6	1511.9	10024.1	1516.4	10028.6
GR	1517.5	10035.3	1518.1	10046.7	1518.1	10056.0	1517.3	10065.5	1517.9	10077.2
GR	1517.8	10085.9	1519.6	10097.0	1520.7	10118.6	1520.8	10125.9	1521.1	10135.8
GR	1521.1	10146.9	1521.4	10156.0	1521.7	10163.8	1522.4	10171.9	1522.8	10180.5
GR	1522.8	10188.4	1522.8	10198.7	1524.3	10221.3	1525.2	10243.2	1525.9	10253.2
GR	1526.5	10260.9	1526.6	10269.1	1527.3	10277.5	1528.2	10284.9	1528.9	10293.4
GR	1527.9	10301.6	1528.1	10315.9	1528.6	10325.9	1528.6	10336.0	1528.7	10345.2
GR	1528.5	10354.1	1528.4	10364.3	1528.4	10375.0	1528.4	10387.0	1528.4	10399.5
GR	1528.6	10412.7	1528.7	10429.3	1529.6	10444.3	1529.5	10457.1	1528.8	10469.2
GR	1528.5	10483.0	1528.9	10494.2	1528.8	10506.0	1528.6	10517.2	1528.4	10535.6

ET			9.1						9897.7	10036.0
X1	.9639	77	9902.7	9958.0	1010	950	1050			
GR	1531.2	9611.8	1531.1	9630.8	1530.9	9657.4	1530.8	9685.2	1530.3	9710.9
GR	1530.0	9731.2	1530.5	9745.4	1530.1	9758.8	1530.4	9773.8	1530.1	9790.9
GR	1529.3	9805.9	1529.5	9815.9	1529.0	9831.8	1527.4	9849.2	1524.0	9863.0
GR	1522.2	9875.1	1521.6	9890.0	1521.6	9902.7	1520.3	9912.7	1517.1	9920.6
GR	1516.4	9926.8	1516.9	9930.7	1520.7	9935.8	1521.8	9949.0	1522.1	9958.0
GR	1522.3	9966.9	1522.6	9974.9	1522.6	9980.2	1522.1	9986.0	1522.4	9997.0
GR	1521.7	10000.0	1521.7	10000.1	1522.0	10015.7	1520.7	10023.5	1517.9	10029.3
GR	1521.6	10036.2	1522.1	10049.9	1522.3	10062.3	1522.3	10072.0	1522.3	10084.6
GR	1522.8	10100.6	1523.7	10109.8	1523.8	10116.8	1524.5	10126.2	1525.7	10132.8

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GR   1525.7    10140.1    1525.7    10147.2    1526.2    10157.6    1526.2    10167.5    1526.2    10176.7
GR   1526.6    10188.6    1525.6    10202.2    1525.6    10213.7    1526.1    10225.5    1525.4    10237.0
GR   1525.4    10243.7    1525.8    10255.4    1525.8    10265.8    1525.8    10276.4    1526.0    10288.0
GR   1526.2    10300.6    1527.0    10315.4    1527.4    10326.0    1527.1    10339.9    1527.5    10349.9
GR   1527.5    10361.2    1527.9    10372.3    1527.9    10382.7    1527.9    10395.1    1528.3    10407.8
GR   1528.5    10418.7    1528.9    10430.6    1529.8    10441.0    1529.9    10450.4    1530.1    10460.0
GR   1531.1    10468.2    1531.2    10470.9

ET                         9.1                                                            9989.8    10170.7
X1   1.1116        36    10100.2    10130.7       775       800       800
GR   1533.3     9677.7    1532.8     9694.9    1531.8     9719.8    1530.5     9741.6    1529.6     9762.1
GR   1528.9     9778.6    1528.7     9795.9    1528.1     9818.9    1528.4     9835.2    1527.5     9848.8
GR   1527.1     9867.9    1524.2     9887.7    1525.9     9902.4    1525.4     9922.2    1525.6     9946.6
GR   1522.4     9950.2    1525.2     9951.8    1526.4     9964.9    1525.4     9981.3    1525.5     9998.8
GR   1525.2    10000.0    1525.2    10000.1    1525.7    10020.3    1526.1    10042.9    1526.2    10056.8
GR   1526.1    10073.5    1526.2    10088.4    1526.1    10100.2    1525.4    10111.0    1522.5    10119.9
GR   1522.4    10127.6    1526.1    10130.7    1526.3    10140.5    1527.8    10151.4    1530.6    10160.7
GR   1529.6    10167.2

ET                         9.1                                                            9876.9    10024.1
X1   1.2205        26     9940.6    10024.1       600       600       650
GR   1532.5     9736.0    1532.4     9754.0    1531.8     9769.9    1530.0     9787.9    1529.8     9798.5
GR   1529.9     9812.7    1529.3     9830.0    1527.9     9841.5    1527.9     9859.3    1528.1     9870.6
GR   1528.6     9879.2    1528.6     9891.8    1526.9     9898.2    1526.9    10000.0    1526.9    10000.1
GR   1528.2    10005.1    1529.3    10024.1    1528.8    10041.3    1529.2    10060.5    1529.4    10070.5
GR   1530.9    10093.5    1532.3    10102.7    1531.6    10114.2    1531.8    10124.4    1531.7    10134.3
GR   1531.7    10134.3

NC     .05        .05        .05
DT       2        912        912
ET                         9.1                                                           10046.7    10135.6
        CROSS-SECTION UPSTREAM OF CONFLUENCE WITH WASH NO.2, DECREASE DISCHARGE.
X1   1.3768        51    10046.7    10135.6       810       810       810
GR   1535.4     9772.7    1535.4     9792.7    1535.4     9812.8    1534.9     9830.7    1534.1     9855.6
GR   1534.1     9885.7    1533.5     9908.3    1532.5     9915.8    1533.1     9930.6    1533.1     9943.7
GR   1533.0     9957.3    1532.9     9972.0    1532.8     9987.4    1532.5     9999.8    1532.3    10000.0
GR   1532.3    10000.1    1532.4    10023.8    1532.2    10038.3    1532.1    10046.7    1531.4    10067.6
GR   1530.0    10080.8    1529.2    10085.6    1530.8    10092.6    1531.2    10101.8    1531.7    10111.4
GR   1531.9    10122.3    1531.4    10128.4    1532.0    10135.6    1532.2    10151.2    1532.5    10162.5
GR   1532.5    10172.8    1532.8    10186.2    1532.9    10209.2    1533.0    10229.8    1533.1    10241.1
GR   1533.0    10251.7    1533.4    10261.7    1534.0    10284.3    1534.1    10295.3    1534.2    10310.0
GR   1534.3    10323.7    1534.1    10337.3    1534.1    10348.2    1534.1    10358.7    1534.1    10367.5
GR   1534.2    10394.4    1534.2    10412.4    1534.5    10422.7    1534.7    10442.7    1534.9    10463.8
GR   1534.9    10468.4

ET                         9.1                                                           10038.4    10149.5
        24360 AVENUE AT-GRADE ROAD CROSSING 120 FT. DOWNSTREAM OF THIS SETION.
X1   1.4904        33    10047.0    10149.5       600       630       630
GR   1537.6     9733.9    1537.5     9751.1    1537.1     9772.0    1537.1     9789.2    1537.1     9803.4
GR   1536.8     9822.4    1536.6     9834.9    1536.8     9847.6    1536.7     9857.2    1536.4     9872.0
GR   1535.9     9886.8    1535.5     9898.4    1535.1     9913.6    1534.6     9929.9    1534.9     9944.0
GR   1534.5     9955.1    1534.5     9974.4    1534.4     9989.1    1533.4    10000.0    1533.4    10000.1
GR   1533.5    10047.0    1532.9    10102.9    1533.8    10149.5    1534.4    10211.9    1534.6    10238.0
GR   1534.8    10255.3    1535.8    10267.8    1536.2    10279.8    1536.8    10293.5    1535.9    10305.5
1
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GR   1536.3    10321.0    1537.0    10353.3    1536.9    10363.2

ET                         9.1                                                            9919.0    10087.1
X1   1.6363        35     9919.0    10087.1       770       770       770
GR   1541.6     9649.8    1541.9     9672.7    1541.7     9692.8    1541.1     9715.7    1541.0     9736.4
GR   1540.5     9760.9    1539.8     9786.4    1538.8     9804.8    1537.8     9824.5    1537.4     9843.1
GR   1536.6     9859.3    1537.6     9871.8    1537.6     9919.0    1537.1     9948.5    1535.1     9987.7
GR   1534.9    10000.0    1534.9    10000.1    1535.9    10031.1    1537.0    10058.1    1537.4    10057.1
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GR   1536.9    10119.9    1537.1    10158.0    1537.1    10173.4    1537.9    10188.6    1538.1    10203.7
GR   1538.0    10216.8    1538.3    10235.0    1538.8    10253.9    1539.3    10297.0    1539.5    10304.9
GR   1539.8    10327.0    1539.9    10352.2    1540.0    10371.2    1540.3    10388.3    1540.7    10405.2
GR   1541.7    10423.5    1541.8    10441.1    1541.8    10453.4    1541.8    10453.5
ET                        9.1                                                                 9946.8    10045.5
X1   1.7783       61     9946.8    10045.5     750       750       750
GR   1543.8     9657.4   1543.9     9680.2    1543.4     9705.4   1542.7     9722.6   1542.3     9741.7
GR   1542.3     9755.7   1541.9     9769.7    1541.7     9783.4   1541.4     9800.7   1541.8     9816.7
GR   1541.5     9831.5   1541.1     9846.4    1539.9     9861.9   1539.8     9875.6   1539.7     9888.4
GR   1539.7     9903.5   1539.9     9920.6    1539.6     9932.1   1539.9     9946.8   1539.6     9958.9
GR   1539.6     9969.6   1539.7     9983.0    1539.2     9997.1   1538.8    10000.0   1538.8    10000.1
GR   1537.0    10008.0   1536.6    10016.5    1536.5    10022.6   1537.3    10029.4   1538.5    10038.5
GR   1540.1    10045.5   1540.6    10057.0    1539.9    10064.5   1539.2    10072.5   1539.4    10080.2
GR   1540.1    10088.3   1540.1    10098.8    1539.8    10109.4   1539.5    10120.9   1540.0    10133.1
GR   1539.5    10141.2   1540.1    10153.9    1540.1    10162.9   1540.2    10175.2   1539.5    10180.7
GR   1540.2    10186.5   1540.2    10193.2    1539.7    10201.2   1540.7    10211.0   1540.8    10223.3
GR   1540.6    10235.9   1540.8    10247.8    1541.4    10272.8   1542.3    10287.5   1542.7    10299.6
GR   1542.6    10310.9   1542.8    10324.1    1542.8    10337.8   1543.4    10363.2   1543.6    10393.6
GR   1543.6    10399.7
ET                        9.1                                                                 9842.0    10059.0
        STOCK POND AND LEVEE UPSTREAM OF THIS SECTION.
        PRIVATE LEVEE IS OVERTOPPED OR WITHOUT ADEQUATE FREEBOARD (I.E. 3 FT.)
        AT SOUTH END.  LEVEE ASSUMED BREACHED FOR THIS ANALYSIS.
X1   1.8929       33     9842.0    10059.0     600       560       600
GR   1545.8     9607.8   1545.0     9632.4    1544.8     9658.2   1545.0     9684.4   1544.5     9706.2
GR   1544.2     9729.3   1544.1     9758.7    1543.5     9779.6   1543.7     9802.3   1542.1     9819.9
GR   1542.7     9842.0   1542.4     9863.9    1542.3     9883.1   1542.8     9931.0   1542.8     9965.2
GR   1542.6    10000.0   1542.6    10000.1    1542.2    10011.9   1543.0    10027.1   1542.2    10044.6
GR   1542.4    10059.0   1542.4    10078.7    1542.4    10100.1   1542.4    10117.2   1542.5    10132.4
GR   1543.9    10147.9   1544.2    10166.9    1544.4    10187.3   1545.6    10208.0   1545.5    10244.0
GR   1545.7    10256.2   1545.6    10270.2    1545.8    10275.6
MC     .049      .049     .045
DT       2       349      349
ET                        9.1                                                                 9934.3    10058.6
X1   2.0037       56     9973.6    10000      750       450       560
GR   1548.3     9705.8   1548.3     9728.3    1548.2     9749.6   1548.1     9771.2   1548.1     9791.7
GR   1548.0     9791.8   1547.9     9804.8    1547.6     9824.4   1547.6     9838.9   1547.6     9854.6
GR   1547.4     9867.6   1547.3     9886.4    1547.1     9893.9   1547.4     9903.7   1547.4     9911.7
GR   1547.4     9921.9   1546.9     9934.8    1546.7     9943.0   1547.4     9953.9   1547.2     9973.6
GR   1546.4     9982.9   1547.2     9990.6    1546.9     9998.8   1547.6    10000.0   1547.6    10000.1
GR   1547.3    10011.4   1547.3    10021.6    1547.3    10034.5   1546.9    10041.5   1547.2    10050.5
GR   1547.2    10058.5   1547.0    10067.4    1546.8    10073.5   1547.4    10077.4   1547.3    10086.5
GR   1547.2    10095.8   1546.8    10102.8    1547.1    10117.6   1547.0    10126.1   1547.4    10134.2
1
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GR   1547.3    10144.5   1547.3    10155.5    1547.3    10165.8   1547.5    10177.6   1547.7    10186.7
GR   1548.0    10196.8   1548.2    10205.7    1548.6    10218.0   1548.4    10233.7   1548.8    10241.6
GR   1548.9    10253.2   1548.6    10267.9    1549.0    10282.5   1549.0    10296.0   1549.0    10310.4
GR   1549.1    10322.9
ET                        9.1                                                                 9960.0    10034.0
X1   2.1259       69     9984.8    10034.0     625       650       640
GR   1554.8     9361.8   1554.2     9390.4    1554.5     9413.8   1554.4     9430.5   1554.7     9446.8
GR   1554.7     9455.6   1554.9     9480.8    1554.9     9493.0   1554.7     9508.6   1554.7     9520.0
GR   1554.4     9553.8   1554.3     9564.3    1554.5     9573.7   1554.3     9582.2   1554.3     9601.1
GR   1554.3     9613.4   1554.1     9644.9    1554.3     9664.8   1554.2     9676.6   1554.2     9690.4
GR   1554.2     9703.8   1554.2     9733.1    1554.0     9748.0   1554.0     9764.8   1554.2     9778.8
GR   1554.0     9791.5   1554.1     9804.0    1554.2     9812.6   1554.1     9830.6   1554.1     9842.4
GR   1553.9     9850.5   1554.0     9860.6    1554.0     9877.2   1553.9     9901.2   1553.6     9924.8
GR   1553.8     9945.4   1553.4     9960.7    1553.4     9977.5   1553.2     9984.8   1552.4     9990.0
GR   1553.3     9995.7   1554.1    10000.0    1554.1    10000.1   1554.2    10009.2   1554.1    10015.8
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GR	1552.8	10028.3	1552.3	10030.5	1553.6	10034.0	1553.5	10042.2	1553.6	10053.3
GR	1552.5	10058.1	1553.5	10066.8	1554.6	10075.7	1553.6	10084.9	1553.3	10096.6
GR	1552.8	10104.2	1554.2	10112.3	1554.3	10124.0	1554.2	10131.2	1554.1	10141.9
GR	1554.5	10174.4	1554.3	10183.6	1554.6	10206.7	1554.4	10216.4	1554.6	10229.8
GR	1554.5	10240.4	1554.9	10254.1	1554.8	10264.4	1554.9	10275.5	1554.9	10286.6
GR	1554.7	10296.0	1554.5	10312.1	1554.8	10331.0	1555.3	10340.3	1555.2	10349.2
GR	1555.0	10362.2	1555.2	10375.1	1554.9	10385.3	1554.9	10395.4	1554.7	10406.5
GR	1554.7	10417.3	1554.7	10432.5	1554.9	10444.2	1554.9	10454.4	1554.9	10467.5
GR	1554.9	10485.9	1555.0	10497.7	1555.0	10508.9	1555.0	10509.0		
ET			9.1						9863.2	9974.0
X1	2.2442	84	9922.1	9947.5	650	650	650			
GR	1560.2	9405.5	1560.2	9432.3	1559.9	9452.6	1559.9	9469.6	1560.1	9488.8
GR	1560.0	9502.9	1560.1	9517.5	1559.8	9530.3	1559.6	9538.6	1559.7	9554.3
GR	1559.7	9565.6	1559.7	9578.0	1559.5	9594.6	1559.5	9603.2	1559.6	9615.0
GR	1559.4	9626.2	1559.8	9644.2	1559.8	9658.7	1559.8	9679.2	1559.9	9700.4
GR	1559.9	9716.0	1559.9	9732.5	1559.8	9748.1	1559.8	9764.7	1560.0	9785.7
GR	1559.9	9803.2	1559.7	9825.1	1560.0	9839.4	1559.8	9856.7	1559.8	9871.2
GR	1560.0	9886.6	1559.9	9910.9	1558.8	9918.2	1559.9	9922.1	1559.7	9934.0
GR	1557.9	9938.8	1560.3	9947.5	1560.2	9957.0	1559.4	9967.7	1559.6	9980.0
GR	1559.2	9989.3	1558.8	9994.4	1560.1	10000.0	1559.7	10000.1	1559.7	10000.2
GR	1560.1	10014.7	1560.1	10027.5	1560.1	10038.8	1560.3	10051.3	1560.2	10066.7
GR	1560.2	10080.8	1559.7	10100.6	1560.1	10117.8	1559.9	10132.4	1559.8	10148.7
GR	1559.6	10167.3	1559.9	10183.1	1559.6	10191.0	1559.9	10203.3	1559.9	10215.1
GR	1559.9	10228.7	1560.0	10243.7	1560.1	10255.6	1560.0	10270.3	1560.2	10288.1
GR	1560.2	10320.9	1560.0	10333.1	1560.1	10345.5	1559.9	10357.7	1560.1	10371.7
GR	1560.2	10385.0	1560.4	10407.6	1560.0	10422.9	1559.9	10435.6	1560.1	10450.7
GR	1560.1	10462.2	1560.0	10467.1	1560.0	10478.7	1560.0	10494.1	1560.2	10514.1
GR	1560.1	10527.9	1560.0	10540.2	1560.3	10555.9	1560.3	10556.0		
ET			9.1						9958.84	10108.8
X1	2.379	95	9991.6	10014.9	720	720	720			
GR	1566.9	9276.4	1566.9	9294.6	1566.9	9311.3	1567.1	9321.6	1566.8	9333.7
GR	1566.5	9343.7	1566.8	9356.3	1566.5	9365.8	1567.1	9375.2	1566.6	9389.7
GR	1566.8	9403.1	1566.7	9413.3	1566.7	9422.4	1565.9	9431.5	1565.9	9439.2
GR	1566.5	9445.7	1565.8	9453.0	1566.5	9463.7	1566.5	9474.1	1566.2	9487.1
GR	1566.3	9499.3	1566.0	9510.3	1565.2	9514.3	1566.5	9530.4	1565.9	9536.2
GR	1566.1	9548.2	1565.6	9557.2	1564.9	9560.9	1566.1	9566.6	1566.2	9575.6

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GR	1566.1	9584.9	1566.5	9593.9	1566.2	9603.6	1566.4	9613.6	1566.4	9623.3
GR	1566.2	9633.2	1566.6	9647.2	1566.2	9656.2	1566.7	9668.5	1566.2	9679.4
GR	1566.2	9689.5	1566.1	9703.0	1566.5	9714.2	1566.2	9730.1	1566.5	9741.8
GR	1566.2	9750.0	1566.5	9765.0	1566.0	9782.0	1566.2	9794.1	1566.2	9809.1
GR	1566.0	9827.6	1566.0	9841.4	1566.0	9854.6	1566.2	9868.7	1565.9	9879.4
GR	1566.2	9889.6	1566.4	9899.7	1566.3	9911.1	1566.3	9927.6	1566.4	9942.3
GR	1566.4	9955.5	1566.9	9972.2	1566.7	9981.8	1566.1	9991.6	1565.9	9996.9
GR	1564.3	10000.0	1564.3	10000.1	1563.9	10002.2	1566.0	10005.9	1566.9	10014.9
GR	1565.8	10021.5	1566.6	10027.9	1566.3	10039.1	1566.8	10046.3	1566.2	10056.5
GR	1566.4	10062.1	1566.4	10072.4	1566.1	10080.0	1566.2	10089.9	1566.2	10092.5
GR	1566.2	10099.7	1565.4	10102.8	1566.8	10111.5	1566.6	10120.7	1567.1	10132.5
GR	1567.0	10145.2	1567.0	10158.1	1567.2	10165.1	1567.0	10174.7	1567.3	10186.2
GR	1567.2	10200.1	1567.2	10209.0	1567.1	10217.3	1566.9	10223.4	1566.6	10228.7
DT	2	179.4	179.4							
ET			9.1						9878.7	9971.0
X1	2.5009	67	9905.7	9971.0	660	660	660			
GR	1573.4	9170.8	1573.5	9190.5	1573.7	9213.0	1573.5	9222.7	1573.2	9236.0
GR	1573.6	9250.9	1573.4	9268.9	1573.4	9282.2	1573.2	9294.5	1573.1	9307.7
GR	1573.2	9321.8	1573.2	9335.4	1572.8	9345.9	1572.7	9357.2	1571.4	9363.7
GR	1571.8	9369.8	1572.7	9376.3	1572.8	9384.0	1572.8	9395.5	1573.0	9407.0
GR	1572.9	9417.6	1572.7	9430.6	1572.9	9452.6	1572.5	9447.7	1572.9	9464.6
GR	1572.9	9498.8	1572.7	9511.0	1572.8	9525.8	1572.7	9543.1	1572.6	9559.6
GR	1572.6	9577.6	1572.7	9596.9	1572.5	9612.3	1572.5	9627.2	1572.3	9645.6

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GR   1572.5     9665.7     1573.3     9684.2     1572.3     9706.1     1572.2     9725.4     1572.2     9745.5
GR   1572.3     9764.1     1572.3     9779.1     1572.4     9801.7     1572.4     9818.7     1572.3     9838.1
GR   1572.6     9851.0     1572.6     9867.2     1572.6     9882.9     1572.0     9905.7     1571.1     9914.1
GR   1572.5     9919.9     1572.8     9933.6     1572.9     9944.5     1572.5     9958.9     1571.0     9962.8
GR   1573.6     9971.0     1571.9     9985.3     1572.2     10000.0    1572.2     10000.1    1572.1     10014.5
GR   1572.9     10035.3    1572.7     10052.7    1572.7     10065.3    1572.7     10074.8    1572.7     10087.1
GR   1572.4     10096.7    1573.1     10110.4

ET                          9.1                                                                 10000.0    10059.4
X1   2.4296        85     10000.0    10059.4       680        680        680
GR   1580.6     9226.3     1580.5     9240.9     1580.5     9255.3     1580.9     9269.4     1580.2     9277.7
GR   1580.3     9287.5     1579.9     9303.8     1579.9     9315.6     1579.8     9325.4     1579.4     9337.3
GR   1578.9     9346.2     1576.0     9356.4     1577.8     9363.0     1578.5     9368.0     1578.3     9376.7
GR   1577.7     9381.6     1578.2     9390.6     1577.9     9398.3     1577.7     9402.6     1578.4     9406.1
GR   1579.5     9413.3     1580.5     9420.3     1580.4     9432.0     1580.2     9441.7     1580.7     9452.3
GR   1579.4     9463.3     1579.5     9478.5     1579.5     9491.5     1579.6     9513.9     1579.5     9527.6
GR   1579.3     9542.9     1579.6     9559.2     1579.8     9578.2     1579.6     9597.2     1579.8     9611.0
GR   1579.3     9621.6     1579.5     9642.3     1579.3     9652.5     1579.3     9669.6     1579.3     9679.7
GR   1579.5     9693.3     1579.6     9711.8     1579.6     9728.1     1579.6     9745.0     1579.3     9759.3
GR   1579.2     9774.9     1579.4     9791.5     1579.2     9807.4     1579.2     9821.5     1579.2     9832.4
GR   1579.1     9849.7     1579.0     9877.2     1578.9     9892.0     1578.7     9913.3     1578.5     9925.7
GR   1578.5     9937.1     1579.1     9946.7     1578.8     9960.2     1579.2     9974.9     1579.1     9990.0
GR   1578.9     10000.0    1578.9     10000.1    1578.9     10000.2    1578.4     10014.2    1578.3     10034.1
GR   1578.4     10049.3    1578.9     10059.4    1579.4     10069.3    1579.5     10081.0    1579.9     10092.9
GR   1579.7     10104.0    1579.6     10113.4    1580.8     10133.6    1579.8     10148.7    1579.1     10160.5
GR   1578.8     10179.4    1579.1     10189.5    1579.1     10199.0    1579.2     10213.3    1579.2     10226.7
GR   1579.2     10239.5    1579.4     10249.6    1579.7     10262.2    1579.7     10272.9    1579.7     10283.4
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ET                7.1        9.1                                        9764.5     10245.6    9888.69    10043.2
        251ST AVENUE AT-GRADE ROAD CROSSING 100 FT. UPSTREAM OF THIS SECTION.
X1   2.7594        95     10015.9    10043.2       660        700        700
GR   1588.4     9044.0     1587.6     9076.2     1588.0     9098.6     1587.9     9117.3     1587.6     9133.1
GR   1586.9     9149.1     1586.3     9167.8     1586.2     9184.4     1586.8     9174.3     1586.6     9182.9
GR   1586.8     9197.4     1585.9     9208.6     1585.9     9216.6     1586.9     9225.9     1586.7     9240.4
GR   1586.1     9252.0     1586.7     9262.0     1586.7     9272.8     1586.7     9287.8     1586.4     9301.4
GR   1586.4     9314.3     1586.4     9330.4     1586.6     9350.4     1586.3     9355.4     1586.7     9364.5
GR   1586.6     9369.5     1585.9     9375.4     1586.6     9384.0     1587.3     9393.2     1587.1     9402.5
GR   1586.0     9409.9     1585.7     9413.7     1586.6     9418.4     1586.2     9424.1     1585.1     9431.7
GR   1586.6     9438.1     1587.2     9450.6     1587.3     9478.7     1587.3     9491.1     1587.0     9507.3
GR   1586.8     9523.5     1586.5     9537.5     1585.7     9554.8     1585.7     9568.5     1585.7     9583.9
GR   1585.5     9593.4     1586.0     9603.8     1586.0     9613.9     1585.9     9631.6     1585.4     9643.0
GR   1585.1     9652.9     1586.1     9665.4     1586.1     9677.4     1586.3     9691.4     1586.5     9709.5
GR   1586.4     9726.7     1586.5     9741.1     1586.2     9764.2     1586.5     9784.8     1587.0     9799.6
GR   1586.7     9815.3     1587.0     9832.2     1586.6     9852.1     1586.4     9871.5     1585.9     9882.0
GR   1587.2     9904.0     1586.7     9918.5     1586.9     9932.7     1586.5     9962.1     1586.5     9970.4
GR   1586.5     9984.4     1587.0     9998.5     1587.0     10000.0    1587.0     10000.1    1587.0     10015.9
GR   1585.7     10026.8    1585.7     10034.7    1586.9     10043.2    1586.8     10058.5    1586.5     10068.0
GR   1586.1     10083.3    1586.1     10094.2    1586.4     10110.1    1586.4     10121.1    1586.0     10134.5
GR   1585.7     10143.0    1585.9     10157.9    1585.5     10169.3    1585.6     10177.5    1585.9     10179.9
GR   1585.3     10183.3    1586.3     10196.0    1586.3     10212.6    1586.3     10226.5    1586.3     10245.6

ET                          9.1                                                                 9989.0     10054.4
X1   2.8920        66      9989.0    10054.4       700        700        700
GR   1593.5     9544.3     1593.5     9567.6     1593.7     9582.1     1593.3     9600.4     1593.5     9619.0
GR   1593.3     9636.6     1593.3     9648.7     1593.5     9664.5     1593.5     9678.1     1593.2     9693.7
GR   1593.5     9727.0     1593.1     9760.7     1592.8     9776.3     1592.8     9790.9     1592.9     9806.5
GR   1592.8     9820.0     1592.9     9839.2     1592.8     9852.4     1592.8     9860.0     1593.2     9866.2
GR   1593.0     9885.5     1593.2     9899.0     1593.2     9907.2     1592.5     9916.6     1592.5     9925.5
GR   1591.9     9934.9     1592.9     9945.6     1593.1     9958.4     1592.7     9967.4     1593.5     9977.5
GR   1593.3     9989.0     1592.5     10000.0    1593.1     10000.2    1593.1     10000.3    1593.3     10008.1
GR   1592.7     10017.4    1592.6     10032.0    1592.9     10043.7    1593.3     10054.4    1593.0     10067.3
GR   1593.2     10078.9    1593.2     10090.1    1593.0     10102.6    1592.9     10120.3    1592.9     10139.4
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GR	1593.1	10169.9	1593.1	10183.0	1593.1	10201.2	1593.1	10219.7	1593.2	10233.5
GR	1593.1	10248.7	1593.5	10266.8	1593.2	10283.7	1592.9	10308.1	1593.8	10325.1
GR	1593.8	10345.2	1593.6	10361.9	1593.5	10375.7	1593.4	10391.7	1593.4	10423.7
GR	1593.6	10446.0	1593.4	10461.1	1593.7	10475.9	1593.7	10485.6	1593.7	10501.4
GR	1594.2	10513.2								
DT	2	140.7	140.7							
ET			9.1						10017.7	10071.3
X1	3.0170	95	10017.7	10071.5	680	640	680			
GR	1600.4	9610.6	1600.2	9620.5	1600.7	9628.0	1600.0	9640.1	1600.2	9656.0
GR	1600.2	9667.7	1599.9	9678.4	1599.6	9689.1	1599.6	9698.7	1599.7	9711.2
GR	1599.7	9729.2	1600.1	9740.4	1599.8	9752.7	1600.0	9765.4	1599.8	9775.7
GR	1599.9	9789.9	1599.9	9804.5	1599.5	9816.3	1599.9	9834.0	1599.9	9850.3
GR	1600.2	9859.0	1600.2	9882.4	1600.2	9896.2	1600.1	9913.5	1600.0	9926.7
GR	1599.9	9941.1	1599.9	9954.1	1599.9	9973.0	1600.0	9983.6	1600.1	9996.9
GR	1599.8	10000.0	1599.8	10000.1	1600.1	10017.7	1597.6	10025.1	1598.8	10030.2
GR	1598.8	10037.2	1598.4	10038.9	1599.4	10042.9	1599.5	10053.9	1599.8	10071.5
GR	1599.9	10084.1	1599.9	10093.4	1600.0	10112.1	1599.8	10119.4	1599.9	10124.7
GR	1597.6	10130.5	1599.4	10139.4	1600.1	10149.3	1599.9	10160.2	1599.8	10164.6

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GR	1598.1	10169.1	1599.5	10176.5	1599.5	10183.3	1598.7	10189.2	1599.4	10196.2
GR	1599.7	10202.8	1599.3	10212.3	1599.9	10224.3	1600.1	10232.8	1599.6	10239.9
GR	1600.0	10248.5	1600.0	10259.9	1599.8	10264.1	1600.1	10264.2	1600.1	10275.2
GR	1599.5	10281.0	1598.5	10284.9	1600.0	10291.3	1600.2	10301.3	1600.3	10314.9
GR	1600.1	10318.9	1599.6	10320.9	1600.1	10327.1	1600.1	10341.1	1600.1	10356.2
GR	1600.0	10371.0	1600.3	10383.5	1600.3	10402.4	1600.1	10418.6	1600.1	10431.2
GR	1600.1	10447.0	1600.1	10464.8	1600.2	10477.9	1600.2	10491.7	1600.3	10506.6
GR	1600.3	10526.0	1600.2	10536.7	1600.2	10549.1	1600.4	10563.6	1600.4	10573.5
GR	1600.0	10585.3	1600.3	10592.3	1600.4	10604.3	1600.4	10619.8	1600.6	10632.2
ET			9.1						9951.0	9991.6
X1	3.1514	85	9951	9991.6	720	700	720			
GR	1608.9	9666.7	1608.7	9688.6	1608.5	9708.6	1608.6	9726.5	1608.2	9741.2
GR	1608.2	9762.7	1608.6	9778.7	1609.0	9788.8	1609.3	9797.7	1608.5	9824.5
GR	1608.4	9839.5	1608.4	9854.9	1608.1	9870.0	1607.8	9881.8	1608.2	9893.6
GR	1608.2	9905.0	1609.2	9917.1	1608.3	9923.7	1608.2	9951.0	1607.8	9963.6
GR	1607.3	9972.7	1607.8	9982.9	1608.4	9991.6	1608.4	10000.0	1608.4	10000.1
GR	1608.5	10022.1	1608.6	10042.9	1608.6	10067.3	1608.4	10090.3	1608.2	10112.4
GR	1608.2	10127.8	1608.2	10144.9	1608.0	10158.6	1608.3	10180.9	1608.1	10199.3
GR	1608.1	10216.9	1608.2	10237.2	1608.3	10257.9	1608.3	10280.0	1608.1	10294.5
GR	1608.1	10310.3	1608.2	10329.0	1608.2	10343.6	1608.4	10356.7	1608.0	10363.0
GR	1608.2	10377.6	1608.5	10389.7	1608.5	10403.9	1608.2	10420.0	1608.2	10427.9
GR	1608.1	10438.0	1608.1	10450.6	1608.1	10468.5	1608.5	10483.8	1608.0	10495.0
GR	1608.4	10511.7	1608.6	10524.9	1607.9	10532.3	1608.2	10536.5	1608.7	10543.0
GR	1608.3	10556.3	1608.5	10568.1	1608.7	10580.2	1608.2	10601.9	1608.4	10622.7
GR	1608.5	10639.2	1608.7	10658.5	1608.8	10680.8	1609.0	10705.2	1609.1	10725.0
GR	1609.0	10746.1	1609.0	10772.8	1609.0	10792.0	1609.0	10814.0	1609.2	10838.8
GR	1609.3	10859.1	1609.4	10883.3	1609.6	10900.3	1609.4	10918.2	1609.6	10936.9
GR	1609.5	10953.1	1609.8	10965.2	1609.6	10980.5	1609.3	10994.9	1609.7	11008.0
ET			9.1						10014.9	10120.0
X1	3.2812	94	10014.9	10070.6	700	630	680			
GR	1617.4	9782.1	1617.4	9808.8	1617.2	9832.7	1617.2	9856.2	1617.2	9874.0
GR	1617.4	9888.2	1617.4	9900.3	1617.2	9912.1	1617.6	9925.9	1617.3	9940.3
GR	1616.9	9952.4	1617.1	9966.8	1616.8	9978.7	1616.1	9997.8	1616.0	10000.0
GR	1615.9	10000.1	1615.8	10014.9	1614.9	10019.8	1617.1	10026.2	1617.1	10037.4
GR	1616.6	10048.7	1614.8	10054.9	1614.6	10063.8	1617.5	10070.6	1616.6	10078.7
GR	1616.9	10090.4	1616.4	10100.6	1616.6	10115.1	1616.6	10125.1	1616.6	10137.1
GR	1616.7	10151.9	1616.5	10163.0	1616.3	10173.2	1616.3	10185.8	1616.2	10201.7
GR	1616.2	10216.8	1616.1	10229.8	1616.6	10244.6	1616.4	10259.1	1617.1	10269.7
GR	1616.9	10279.1	1616.9	10286.9	1617.5	10294.0	1616.3	10304.8	1617.3	10317.7
GR	1616.8	10332.3	1616.9	10346.2	1616.6	10361.5	1616.5	10375.1	1616.1	10388.1
GR	1616.0	10398.4	1615.6	10414.8	1615.1	10428.8	1614.7	10441.5	1615.5	10450.8

GR	1615.2	10453.0	1616.0	10472.9	1615.5	10487.8	1615.9	10500.4	1615.5	10512.6
GR	1615.5	10525.2	1615.5	10534.4	1615.2	10548.8	1615.5	10562.3	1615.5	10575.6
GR	1615.8	10591.9	1615.6	10606.1	1615.6	10621.6	1615.8	10635.9	1615.8	10653.4
GR	1615.9	10668.0	1616.1	10682.9	1616.1	10691.6	1615.9	10691.7	1616.0	10714.1
GR	1616.0	10736.3	1616.2	10747.5	1616.0	10753.6	1616.4	10760.6	1615.7	10769.8
GR	1616.4	10778.5	1616.4	10796.7	1616.6	10812.5	1616.4	10819.4	1617.1	10835.4
GR	1617.0	10850.3	1617.2	10868.4	1616.8	10886.4	1616.8	10902.6	1617.0	10919.1
GR	1617.0	10935.7	1617.1	10951.1	1617.2	10969.5	1617.2	10989.3		

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ET			9.1						9924.0	10035.0
X1	3.4081	90	9924.0	9987.9	680	680	680			
GR	1625.5	9826.9	1625.9	9847.2	1625.9	9864.1	1625.7	9878.0	1625.6	9889.1
GR	1625.5	9902.9	1625.7	9899.9	1624.8	9908.0	1625.8	9915.3	1625.8	9924.0
GR	1624.3	9931.6	1624.9	9938.5	1625.4	9946.9	1624.9	9957.5	1625.2	9975.3
GR	1624.3	9980.3	1625.7	9987.9	1625.9	10000.0	1625.9	10000.1	1625.5	10013.6
GR	1625.7	10033.3	1625.4	10048.4	1625.6	10062.2	1625.6	10074.2	1625.8	10089.0
GR	1625.5	10101.4	1625.4	10113.9	1625.2	10130.9	1625.4	10146.0	1625.4	10164.2
GR	1625.4	10175.9	1625.8	10185.2	1625.5	10199.5	1625.6	10211.6	1624.5	10219.4
GR	1625.9	10226.7	1625.3	10237.0	1625.3	10249.9	1625.5	10262.8	1625.4	10276.1
GR	1625.4	10300.8	1625.5	10311.4	1625.6	10324.4	1625.6	10337.1	1625.4	10350.4
GR	1625.2	10361.6	1625.4	10377.8	1625.2	10392.2	1624.9	10407.7	1625.2	10422.0
GR	1625.1	10438.2	1624.9	10454.2	1625.3	10465.6	1624.8	10477.4	1623.7	10490.4
GR	1624.6	10506.8	1623.2	10516.5	1624.5	10524.2	1624.4	10532.7	1624.8	10540.3
GR	1624.8	10552.2	1624.5	10567.9	1625.0	10587.4	1624.8	10602.1	1624.9	10620.9
GR	1624.9	10635.5	1624.6	10651.8	1624.9	10665.1	1624.7	10679.6	1625.1	10694.2
GR	1625.0	10711.2	1624.8	10723.9	1625.5	10736.4	1624.4	10741.9	1625.2	10750.0
GR	1625.2	10760.7	1625.6	10772.5	1625.5	10783.2	1625.8	10797.1	1625.8	10812.5
GR	1625.9	10827.4	1625.8	10844.4	1626.1	10860.1	1626.1	10865.2	1626.5	10865.3
GR	1626.6	10880.9	1624.5	10897.9	1626.4	10907.2	1625.6	10914.8	1626.5	10919.9
DT	2	102	102							
ET			9.1						9947.1	10075.0
X1	3.5473	80	9953.7	10000	740	720	750			
GR	1634.6	9878.2	1634.7	9903.8	1635.1	9922.9	1634.4	9939.4	1634.1	9946.9
GR	1633.1	9949.0	1635.0	9953.7	1634.5	9965.8	1634.4	9979.0	1634.2	9995.3
GR	1633.1	9999.9	1633.6	10000.0	1633.6	10000.1	1634.7	10008.4	1634.6	10020.0
GR	1635.1	10031.7	1634.8	10040.7	1634.5	10050.2	1634.8	10064.3	1634.6	10079.2
GR	1634.5	10092.2	1634.4	10112.0	1633.9	10125.0	1634.1	10141.2	1634.1	10162.9
GR	1633.1	10176.2	1634.2	10188.1	1634.0	10203.4	1634.4	10225.5	1634.0	10235.1
GR	1634.4	10243.4	1634.3	10255.5	1634.1	10279.5	1634.7	10290.7	1634.3	10302.0
GR	1634.5	10315.7	1634.6	10333.8	1634.8	10349.0	1634.8	10363.7	1635.0	10380.8
GR	1635.4	10399.7	1635.5	10417.8	1635.4	10441.9	1635.4	10457.7	1635.0	10479.6
GR	1635.2	10500.2	1634.9	10515.9	1634.5	10533.1	1634.7	10554.5	1634.5	10571.2
GR	1634.5	10592.1	1634.2	10615.7	1634.1	10633.7	1634.0	10655.5	1634.4	10672.0
GR	1634.0	10684.6	1633.2	10697.7	1633.8	10705.6	1633.2	10714.9	1633.6	10721.8
GR	1633.2	10729.5	1633.7	10738.2	1633.8	10745.5	1633.2	10755.6	1633.7	10767.7
GR	1633.4	10775.8	1634.6	10787.3	1634.3	10793.3	1633.5	10805.2	1633.2	10815.2
GR	1633.8	10823.7	1633.9	10829.4	1633.8	10840.4	1634.2	10857.9	1634.6	10873.5
GR	1634.6	10886.1	1635.0	10902.4	1634.7	10922.5	1634.9	10938.9	1634.6	10957.2
ET			9.1						9967.0	10043.4
X1	3.6306	65	10000	10044.1	450	460	450			
GR	1641.7	9896.6	1641.8	9913.0	1641.0	9934.0	1641.8	9952.3	1641.5	9961.8
GR	1640.0	9969.3	1640.5	9975.4	1640.3	9987.2	1640.3	10000.0	1640.0	10000.1
GR	1639.8	10000.2	1640.1	10017.6	1640.1	10031.9	1640.7	10044.1	1639.9	10050.7
GR	1640.4	10060.0	1640.0	10069.4	1640.2	10080.9	1640.3	10091.0	1640.2	10106.4
GR	1640.0	10119.8	1640.3	10133.5	1640.3	10149.6	1640.1	10164.3	1640.2	10174.5
GR	1640.2	10190.3	1640.1	10204.7	1640.1	10220.2	1640.1	10239.9	1640.3	10248.5
GR	1640.3	10260.1	1640.3	10276.8	1640.1	10302.0	1641.2	10319.0	1641.6	10334.0
GR	1641.5	10348.7	1641.2	10365.1	1641.1	10381.2	1641.3	10403.8	1641.3	10420.8
GR	1641.0	10438.4	1641.2	10457.3	1641.1	10473.6	1641.2	10500.4	1640.0	10512.5
GR	1641.2	10521.8	1641.5	10532.0	1640.8	10543.2	1641.3	10550.9	1640.8	10562.3

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GR   1640.7    10573.5     1641.4    10580.9     1640.7    10594.7     1640.9    10613.5     1640.1    10626.9
GR   1640.9    10634.0     1640.8    10643.8     1640.8    10658.8     1641.7    10675.0     1641.7    10691.0
GR   1641.9    10708.4     1642.2    10728.1     1642.1    10749.9     1641.8    10774.7     1641.4    10789.0

ET                          9.1                                                                 9984.1    10100.0
X1   3.7613        50     9984.1    10020.7         680         680         680
GR   1649.9     9893.0     1650.1     9913.2     1650.4     9935.2     1650.7     9949.9     1649.3     9957.8
GR   1650.0     9968.4     1650.0     9984.1     1649.8     9998.9     1649.2    10000.0     1648.2    10000.1
GR   1648.2    10005.4     1649.2    10009.1     1650.8    10020.7     1650.1    10037.6     1649.7    10066.0
GR   1650.1    10082.8     1650.3    10098.7     1650.3    10117.0     1650.7    10134.9     1650.6    10147.8
GR   1650.4    10168.8     1650.4    10190.0     1650.4    10213.0     1650.5    10238.5     1650.1    10253.2
GR   1650.1    10274.5     1649.8    10291.4     1649.8    10327.4     1649.7    10345.3     1649.5    10357.2
GR   1648.2    10363.6     1648.0    10369.6     1649.9    10374.7     1649.0    10383.5     1648.6    10390.4
GR   1649.0    10396.3     1647.9    10399.9     1648.8    10406.5     1648.5    10416.9     1649.4    10429.3
GR   1649.8    10442.2     1650.4    10452.5     1650.4    10468.2     1651.3    10484.9     1651.7    10501.1
GR   1652.1    10515.7     1652.6    10530.9     1652.9    10549.7     1653.8    10570.7     1652.9    10588.9

ET                          9.1                                                                 9967.0    10033.7
X1   3.8872        23    10012.8    10035.0         700         600         690
GR   1658.4     9848.7     1658.5     9871.1     1658.4     9890.3     1658.4     9918.0     1658.4     9947.0
GR   1657.7     9967.7     1657.2     9974.1     1657.8     9985.2     1657.3     9991.7     1657.7    10000.0
GR   1657.7    10000.1     1657.9    10012.8     1656.4    10021.1     1656.3    10029.4     1658.1    10035.0
GR   1658.8    10047.4     1659.3    10058.0     1660.3    10069.1     1659.5    10082.3     1659.8    10098.2
GR   1659.9    10113.1     1660.5    10128.7     1660.6    10148.1

ET                          9.1                                                                 9987.0    10021.2
X1   4.0548        24    10000     10021.2         940         940         940
GR   1671.7     9976.0     1671.4     9953.7     1669.6     9968.7     1667.9     9984.1     1666.7     9998.3
GR   1666.9    10000.0     1666.9    10000.1     1665.9    10014.0     1667.0    10021.2     1668.1    10032.8
GR   1668.7    10045.2     1669.1    10058.5     1669.4    10071.3     1668.4    10085.5     1669.4    10100.2
GR   1668.6    10116.6     1668.3    10127.7     1668.8    10137.7     1668.7    10147.7     1669.7    10154.8
GR   1670.2    10165.0     1670.5    10176.8     1671.2    10196.1     1671.6    10212.2

NC      .03        .03        .03        .3         .5
        BEGIN 3-49"X33" C.S.P.A. CULVERTS UNDER SUN VALLEY PARKWAY (STRUC.#2)
X1   4.0662        10     9992      10008          60          60          60
X3      10                                                                 1672.7     1672.7
GR    1674      9905      1673       9922      1670       9943      1669       9951   1667.94       9992
GR   1667.9     10008      1670      10040      1672      10095      1673      10160     1673.5      10200

NC     .012       .012       .012
SD    1.25       4.93       2.63                 16.0        6.5       26.1          0   1669.07    1667.94
        END CULVERTS (STRUC. #2).
X1   4.0938        10     9992      10008         146         146         146
X2                            1    1671.82     1672.7
X3      10                                                                 1672.7     1672.7
BT      13     10000    1675.14                10280.8     1674.3                10380.8    1674.15
BT   10480     1674.3                10608     1674.68                10477.9     1474.8                10678
BT   1474.3                10719     1473.5                10726     1473.1                 10730    1472.7
BT              10735    1472.7                10743     1474.7                 10783     1475
GR    1674      9940      1673       9950      1672       9960     1671.8       9991   1669.07       9992
GR   1669.1     10008     1671.9     10009      1672      10040      1673      10050      1674      10070
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NC      .03        .03        .03
        FLOODPLAIN\FLOODWAY DELINEATED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
        FLOW LIMITS IS POSSIBLE AND PRESERVATION OF DETENTION UPSTREAM OF ROAD
        IS REQUIRED.
X1   4.1013         6     9990      10010          40          40          40
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GR     1675       9940       1672       9970       1670       9990       1670      10010       1672      10023
GR     1675      10077

NC     .049       .049       .045         .1         .3
QT        2        349        349
ET                            9.1                                                                 9958.84    10108.8
          REPEAT CROSS-SECTION FOR START OF WASH 1 TRIBUTARY ANALYSIS
X1    -2.379         95     9991.6    10014.9        720        720        720
GR    1566.9     9276.4     1566.9     9294.6     1566.9     9311.3     1567.1     9321.6     1566.8     9333.7
GR    1566.5     9343.7     1566.8     9356.3     1566.5     9365.8     1567.1     9375.2     1566.6     9389.7
GR    1566.8     9403.1     1566.7     9413.3     1566.7     9422.4     1565.9     9431.5     1565.9     9439.2
GR    1566.5     9445.7     1565.8     9453.0     1566.5     9463.7     1566.5     9474.1     1566.2     9487.1
GR    1566.3     9499.3     1566.0     9510.3     1565.2     9514.3     1566.5     9530.4     1565.9     9536.2
GR    1566.1     9548.2     1565.6     9557.2     1564.9     9560.9     1566.1     9566.6     1566.2     9575.6
GR    1566.1     9584.9     1566.5     9593.9     1566.2     9603.6     1566.4     9613.6     1566.4     9623.3
GR    1566.2     9633.2     1566.6     9647.2     1566.2     9654.2     1566.7     9668.5     1566.2     9679.4
GR    1566.2     9689.5     1566.1     9703.0     1566.5     9714.2     1566.2     9730.1     1566.5     9741.8
GR    1566.2     9750.0     1566.5     9765.0     1566.0     9782.0     1566.2     9794.1     1566.2     9809.1
GR    1566.0     9827.6     1566.0     9841.4     1566.0     9854.6     1566.2     9868.7     1565.9     9879.4
GR    1566.2     9889.6     1566.4     9899.7     1566.3     9911.1     1566.3     9927.6     1566.4     9940.3
GR    1566.4     9955.5     1566.9     9972.2     1566.7     9981.8     1566.1     9991.6     1565.9     9996.9
GR    1564.3    10000.0     1564.3    10000.1     1563.8    10002.2     1566.0    10005.9     1566.9    10014.9
GR    1565.8    10021.5     1566.6    10027.9     1566.3    10039.1     1566.8    10046.3     1566.2    10056.5
GR    1566.4    10062.1     1566.4    10072.4     1566.1    10080.0     1566.2    10089.9     1566.2    10092.5
GR    1566.2    10099.7     1565.4    10102.8     1566.8    10111.3     1566.6    10120.7     1567.1    10132.5
GR    1567.0    10145.2     1567.0    10156.1     1567.2    10165.1     1567.0    10176.7     1567.3    10186.2
GR    1567.2    10200.1     1567.2    10209.0     1567.1    10217.3     1566.9    10223.4     1566.6    10229.2

QT        2     131.9      131.9
ET                            9.1                                                                 10179.6    10217.2
          ADD 10 TO CROSS-SECTION I.D. NO. FOR TRIBUTARY.  I.D. NUMBER IN RIVER
          MILES ALONG TRIBUTARY BASELINE.   STATION 10175 = TRIB. BASELINE.
X1    12.510         32    10178.6    10199.4        660        650        700
GR    1573.3    10124.9     1573.2    10140.7     1573.1    10151.2     1573.1    10159.7     1572.0    10167.5
GR    1572.9    10178.6     1571.5    10185.1     1572.0    10188.6     1572.4    10199.4     1572.5    10216.6
GR    1572.0    10231.8     1572.2    10241.1     1572.2    10249.6     1572.3    10261.1     1572.4    10272.5
GR    1573.1    10282.6     1573.2    10292.1     1573.3    10305.1     1573.3    10319.8     1573.3    10333.0
GR    1573.3    10347.3     1573.4    10363.3     1573.4    10379.5     1573.5    10392.8     1573.5    10409.2
GR    1573.6    10428.9     1573.5    10445.6     1573.6    10463.1     1573.8    10487.2     1573.8    10503.4
GR    1573.8    10525.3     1574.0    10533.0

ET                            9.1                                                                 10504.2    10620.0
          STATION 10535 = TRIB. BASELINE.
X1    12.639         46    10598.3    10636.3        700        620        700
GR    1578.5    10295.9     1579.5    10310.5     1579.0    10326.1     1578.1    10330.5     1578.9    10336.2
GR    1578.6    10342.1     1578.3    10347.7     1579.1    10351.8     1578.4    10357.3     1579.1    10364.5
GR    1579.1    10369.5     1578.2    10374.4     1578.5    10379.7     1578.7    10388.3     1578.5    10400.0
GR    1578.7    10410.6     1578.7    10423.6     1578.8    10434.6     1578.5    10442.0     1578.6    10448.5
1
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GR    1578.7    10462.5     1578.7    10475.4     1578.6    10489.4     1578.5    10504.2     1578.4    10522.1
GR    1579.0    10535.6     1579.0    10544.3     1579.2    10555.6     1579.3    10569.4     1579.8    10585.2
GR    1579.8    10598.3     1578.5    10609.3     1579.5    10622.8     1579.9    10636.3     1579.4    10648.6
GR    1579.3    10658.9     1579.5    10670.8     1579.4    10682.2     1579.2    10694.6     1579.3    10703.9
GR    1579.3    10717.7     1579.4    10734.6     1579.3    10749.7     1579.7    10773.6     1579.8    10787.2
GR    1580.0    10794.2

ET                            9.1                                                                 10903.3    10929.6
          STATION 10940 = TRIB. BASELINE.
X1    12.761         67    10919.6    10929.6        635        650        700
GR    1586.3    10262.5     1586.0    10274.8     1586.2    10287.1     1586.2    10310.2     1586.0    10324.6
GR    1586.0    10339.4     1586.0    10353.1     1586.0    10378.7     1586.0    10390.8     1586.0    10406.6
GR    1586.0    10422.3     1585.7    10436.6     1585.2    10449.4     1585.2    10465.5     1585.4    10477.4
GR    1585.2    10487.5     1585.8    10501.8     1586.8    10516.2     1585.6    10532.4     1585.4    10545.1
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GR   1585.3    10589.4    1585.2    10576.8    1585.5    10587.7    1585.7    10602.6    1585.3    10617.5
GR   1585.8    10632.7    1585.6    10649.5    1585.6    10665.6    1585.5    10679.6    1585.9    10691.0
GR   1584.0    10704.8    1585.6    10716.3    1585.6    10733.8    1585.6    10749.5    1585.6    10763.4
GR   1585.3    10777.6    1585.4    10797.9    1585.8    10812.9    1586.3    10834.7    1583.6    10841.8
GR   1586.8    10845.1    1586.6    10858.4    1586.3    10866.7    1586.2    10876.7    1586.4    10884.9
GR   1585.9    10893.8    1585.2    10906.9    1584.0    10913.2    1585.6    10919.6    1584.1    10924.1
GR   1585.5    10929.6    1585.7    10948.6    1585.1    10958.3    1585.0    10961.3    1585.9    10970.2
GR   1586.0    10981.2    1586.0    10994.3    1586.1    11007.7    1586.1    11027.7    1586.1    11039.1
GR   1586.1    11050.9    1586.1    11064.2    1586.1    11078.3    1586.1    11093.0    1586.2    11108.8
GR   1586.3    11122.3    1586.3    11123.4

ET                          9.1                                                          11277.3    11345.0
        STATION 11295 = TRIB. BASELINE.
X1   12.904        67    11299.0    11310.0        770        740        770
GR   1594.1    10587.7    1594.2    10604.0    1593.8    10622.5    1593.7    10633.0    1593.7    10649.9
GR   1593.7    10659.9    1593.7    10676.6    1593.5    10690.0    1593.9    10703.5    1593.7    10722.5
GR   1593.8    10736.6    1593.8    10747.9    1593.8    10763.4    1593.8    10799.5    1593.9    10811.2
GR   1593.9    10829.1    1593.9    10840.5    1593.8    10854.3    1593.6    10867.0    1593.5    10882.6
GR   1593.4    10894.1    1593.1    10911.3    1593.3    10925.9    1593.1    10941.8    1593.2    10961.9
GR   1592.8    10969.8    1593.4    10974.6    1593.4    10987.8    1593.2    11000.6    1593.3    11014.9
GR   1593.0    11019.8    1592.3    11023.3    1593.0    11027.9    1593.3    11037.6    1593.3    11050.4
GR   1593.3    11059.5    1592.5    11063.3    1591.7    11068.5    1593.3    11074.2    1593.3    11087.4
GR   1593.3    11104.3    1593.3    11118.1    1593.3    11135.3    1593.4    11154.0    1593.5    11173.0
GR   1593.5    11194.1    1593.5    11220.6    1593.7    11238.2    1593.7    11253.5    1593.3    11269.6
GR   1593.1    11274.2    1593.4    11280.2    1593.0    11283.0    1593.5    11286.8    1593.5    11299.0
GR   1592.5    11303.6    1593.4    11310.0    1593.4    11317.4    1592.7    11321.2    1593.9    11329.1
GR   1593.3    11339.8    1593.4    11352.2    1594.0    11369.8    1594.1    11389.6    1594.1    11409.6
GR   1594.1    11433.2    1594.2    11437.1

OT        2      105.6      105.6
ET                          9.1                                                          11630.9    11697.7
        STATION 11695 = TRIB. BASELINE.
X1   13.023        91    11686.4    11697.7        600        625        625
GR   1600.4    10707.7    1600.1    10716.5    1600.4    10725.3    1600.7    10737.6    1600.7    10750.9
GR   1600.7    10766.6    1601.1    10783.4    1601.2    10796.9    1600.9    10811.9    1600.9    10824.6
GR   1600.7    10838.5    1601.1    10851.2    1600.8    10859.7    1601.2    10872.9    1601.1    10890.6
GR   1601.2    10906.2    1600.9    10932.4    1600.9    10946.3    1600.8    10964.2    1600.5    10977.0
GR   1600.7    10993.2    1600.5    11010.0    1600.8    11020.8    1600.8    11036.8    1600.5    11049.0
GR   1600.1    11061.0    1600.0    11072.2    1600.2    11081.5    1600.0    11089.6    1600.4    11108.0
GR   1600.1    11119.2    1600.2    11129.0    1600.1    11143.5    1600.2    11155.4    1600.1    11169.8
1
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GR   1600.2    11186.1    1600.1    11198.2    1600.0    11211.1    1599.0    11222.3    1599.3    11236.4
GR   1598.8    11241.2    1599.3    11247.9    1598.9    11258.5    1599.4    11271.2    1599.2    11285.3
GR   1599.2    11300.7    1599.4    11316.2    1599.1    11330.9    1599.5    11342.9    1599.5    11351.9
GR   1599.2    11365.1    1599.6    11382.8    1599.1    11394.0    1599.4    11406.6    1599.5    11418.3
GR   1599.8    11431.9    1599.8    11446.8    1599.7    11462.3    1599.4    11480.0    1599.4    11502.3
GR   1599.5    11513.8    1599.6    11526.5    1599.6    11541.8    1599.5    11556.7    1599.4    11571.1
GR   1599.4    11589.5    1599.5    11602.7    1599.5    11615.4    1598.9    11619.9    1599.6    11630.8
GR   1599.7    11643.2    1599.8    11656.4    1599.8    11666.8    1599.5    11680.0    1599.6    11686.4
GR   1598.8    11691.8    1600.0    11697.7    1599.7    11707.4    1599.9    11724.6    1600.0    11739.3
GR   1600.2    11739.4

ET                          9.1                                                          11690.0    11739.7
        STATION 11735 = TRIB. BASELINE.
X1   13.170        51    11725.9    11737.7        675        625        850
GR   1609.7    11029.4    1609.5    11052.1    1609.4    11070.2    1609.5    11092.3    1609.2    11108.0
GR   1609.4    11125.6    1609.3    11141.8    1609.4    11157.7    1609.3    11177.9    1609.6    11198.5
GR   1609.5    11214.4    1609.6    11234.3    1609.7    11252.0    1609.8    11270.9    1609.7    11288.9
GR   1608.7    11299.8    1609.6    11306.1    1609.1    11316.5    1609.1    11329.6    1609.0    11341.5
GR   1608.1    11355.6    1608.3    11369.0    1608.6    11377.5    1609.0    11390.0    1609.5    11406.6
GR   1609.4    11423.0    1609.8    11439.9    1609.9    11456.2    1610.3    11471.3    1609.9    11488.3
GR   1610.4    11503.5    1610.1    11518.4    1609.5    11535.2    1609.7    11550.5    1609.6    11562.8
GR   1609.9    11575.0    1609.9    11591.4    1609.9    11607.1    1609.8    11621.8    1609.5    11642.1
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GR   1609.5    11656.0     1609.8    11671.4     1609.6    11689.5     1607.3    11703.1     1609.3    11719.1
GR   1609.1    11725.9     1608.4    11735.1     1609.2    11739.7     1609.4    11753.3     1609.4    11769.6
GR   1609.1    11778.2

ET                          9.1                                                               11606.0    11655.5
        STATION 11640 = TRIB. BASELINE.
X1   13.277        51    11640.7    11655.5         550         575         600
GR   1618.0    11118.2     1617.7    11136.6     1617.1    11156.5     1616.8    11171.4     1616.9    11184.0
GR   1616.8    11196.1     1616.8    11212.2     1616.7    11222.5     1616.8    11234.4     1616.9    11247.5
GR   1616.4    11255.2     1615.1    11264.9     1616.2    11271.0     1616.8    11282.5     1616.9    11293.3
GR   1616.9    11306.5     1616.9    11319.0     1616.6    11336.0     1617.0    11369.2     1617.1    11382.6
GR   1617.3    11400.4     1617.1    11419.6     1617.9    11432.6     1617.8    11446.5     1617.6    11461.1
GR   1617.7    11474.3     1617.6    11487.7     1617.7    11501.7     1617.6    11512.2     1617.5    11520.3
GR   1615.7    11526.5     1617.5    11532.0     1617.7    11542.2     1617.3    11550.7     1617.2    11563.2
GR   1616.8    11573.3     1616.0    11583.4     1616.9    11590.7     1616.7    11601.9     1615.9    11606.3
GR   1617.1    11612.9     1617.1    11620.6     1617.3    11640.7     1615.8    11647.6     1616.8    11655.5
GR   1616.7    11665.4     1617.5    11675.2     1617.6    11688.3     1618.0    11699.9     1617.9    11707.9
GR   1617.9    11708.0

ET                          9.1                                                               11374.2    11389.1
        STATION 11375 = TRIB. BASELINE.
X1   13.408        53    11374.2    11389.1         700         690         710
GR   1626.6    10930.7     1626.5    10940.4     1626.1    10948.1     1626.6    10964.6     1626.7    10977.3
GR   1626.9    10982.7     1626.1    10989.7     1626.4    10999.5     1626.3    11006.4     1626.9    11014.7
GR   1626.9    11025.4     1627.1    11035.7     1626.9    11048.1     1627.1    11058.7     1627.2    11068.2
GR   1626.9    11078.8     1626.6    11088.7     1626.6    11096.3     1626.8    11104.5     1626.8    11111.7
GR   1627.4    11124.2     1627.0    11129.3     1626.5    11135.6     1626.1    11139.1     1627.2    11145.4
GR   1627.1    11164.6     1627.1    11177.5     1627.2    11188.7     1627.0    11203.0     1627.1    11215.1
GR   1626.9    11230.5     1627.5    11246.8     1627.3    11260.9     1627.5    11275.2     1627.7    11292.2
GR   1627.6    11306.5     1627.6    11326.6     1627.5    11343.2     1626.9    11351.4     1627.0    11366.2
GR   1626.4    11374.2     1624.0    11381.6     1626.6    11389.1     1626.9    11406.2     1626.5    11426.9
GR   1626.6    11446.6     1625.8    11455.1     1626.8    11461.5     1626.6    11470.6     1626.3    11480.2
1
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GR   1626.3    11495.1     1626.8    11507.3     1626.8    11509.1

DT        2       79.3       79.3
ET                          9.1                                                               11195.0    11213.0
        STATION 11205 = TRIB. BASELINE.
X1   13.536        35    11197.0    11210.4         690         675         750
GR   1634.9    10985.4     1634.9    11003.0     1634.6    11017.9     1634.4    11030.8     1634.4    11046.8
GR   1634.4    11061.8     1635.0    11076.2     1635.0    11089.6     1634.9    11103.4     1635.2    11121.5
GR   1634.8    11141.4     1635.0    11156.0     1635.0    11168.6     1634.3    11171.8     1635.8    11180.2
GR   1636.2    11188.3     1635.0    11197.0     1633.4    11203.2     1635.0    11210.4     1636.0    11218.1
GR   1635.7    11224.6     1635.0    11235.8     1634.0    11243.8     1635.5    11254.1     1634.8    11263.4
GR   1635.5    11274.7     1635.4    11283.2     1635.0    11303.3     1635.1    11315.3     1634.8    11326.4
GR   1635.1    11347.5     1635.0    11361.7     1635.5    11380.7     1635.3    11397.9     1635.3    11409.0

ET                7.1        9.1                                 11016.6    11309.0    11215.5    11227.9
DT        2        94         94
        STATION 11215 = TRIB. BASELINE.
        BASED ON FLOW DISTRIBUTION FOR THIS SECTION APPROX. 14.7 CFS SPLITS
        FROM TRIBUTARY AND JOINS MAIN WASH #1 DOWNSTREAM OF THIS SECTION.
X1   13.616        34    11215.5    11227.9         440         400         450
X2                                                                                                                15
GR   1641.1    10817.5     1640.9    10833.0     1640.7    10848.6     1640.0    10856.1     1640.8    10868.3
GR   1640.2    10878.8     1641.3    10893.7     1641.1    10912.5     1640.8    10930.7     1641.1    10953.3
GR   1641.5    10973.9     1641.5    10998.0     1641.7    11016.6     1641.5    11042.2     1641.5    11061.5
GR   1640.8    11077.8     1640.9    11096.5     1640.1    11116.6     1638.9    11120.3     1641.0    11129.8
GR   1640.3    11149.5     1640.5    11168.4     1640.4    11187.2     1639.9    11202.9     1639.8    11213.5
GR   1638.4    11220.4     1640.6    11227.9     1640.2    11242.4     1639.9    11260.7     1640.9    11277.4
GR   1640.9    11286.3     1641.3    11307.4     1641.0    11319.4     1640.9    11329.0

ET                          9.1                                                               11112.3    11124.7
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        STATION 11115 = TRIB. BASELINE.
X1   13.763        59    11112.3    11124.7        650        650        660
GR   1652.9    10610.6     1652.8    10630.0     1652.7    10650.7     1652.8    10670.3     1652.6    10687.5
GR   1652.0    10709.5     1651.2    10724.0     1650.1    10734.1     1651.9    10743.8     1652.0    10753.6
GR   1651.6    10765.5     1652.2    10778.6     1651.6    10792.9     1651.3    10809.7     1649.9    10822.9
GR   1649.1    10835.9     1650.3    10847.9     1650.0    10857.6     1649.8    10869.8     1650.4    10877.3
GR   1649.2    10882.7     1649.4    10889.8     1649.8    10900.9     1649.6    10907.7     1650.3    10918.7
GR   1650.1    10931.0     1650.2    10957.9     1649.9    10970.5     1649.0    10981.4     1648.7    10994.0
GR   1647.9    11007.6     1648.2    11015.4     1649.1    11026.3     1649.4    11053.3     1649.5    11067.4
GR   1649.1    11081.9     1648.1    11105.2     1647.4    11112.3     1646.5    11116.2     1647.8    11124.7
GR   1648.5    11131.6     1647.8    11139.5     1646.8    11145.9     1648.0    11151.5     1648.8    11173.1
GR   1648.4    11184.9     1647.5    11194.8     1648.7    11206.2     1648.9    11217.4     1648.9    11231.2
GR   1648.8    11249.0     1649.1    11265.3     1649.2    11281.2     1649.2    11300.5     1649.2    11316.6
GR   1649.3    11332.4     1649.4    11346.0     1649.0    11356.3     1649.0    11362.1

ET                           9.1                                                    11275.1    11296.5
        STATION 11245 = TRIB. BASELINE.
X1   13.875        45    11274.1    11296.5        640        690        725
GR   1659.3    10989.5     1659.4    11004.2     1658.9    11019.9     1659.0    11038.8     1659.2    11051.6
GR   1659.1    11071.0     1658.4    11086.3     1657.9    11101.4     1657.0    11118.7     1656.1    11130.8
GR   1657.2    11143.6     1658.2    11151.9     1657.6    11161.6     1657.5    11171.6     1658.4    11183.6
GR   1658.2    11193.7     1657.9    11200.9     1657.6    11222.5     1658.3    11239.0     1658.3    11249.1
GR   1657.7    11262.7     1657.2    11274.1     1654.9    11283.4     1656.9    11296.5     1658.4    11311.8
GR   1658.4    11320.2     1657.8    11329.3     1658.0    11340.5     1658.1    11347.7     1657.7    11358.5
1
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GR   1657.5    11366.5     1657.5    11376.8     1657.4    11384.8     1657.6    11398.7     1658.0    11408.8
GR   1658.2    11425.2     1658.4    11439.6     1658.9    11453.3     1659.6    11465.2     1659.6    11477.3
GR   1659.4    11494.3     1659.6    11509.6     1660.1    11526.0     1660.7    11540.4     1661.2    11548.0

ET                           9.1                                                    11011.0    11022.7
        STATION 11025 = TRIB. BASELINE.
X1   14.000        23    11011.0    11022.7        690        640        700
GR   1670.4    10893.6     1670.5    10902.2     1670.2    10905.1     1670.8    10911.6     1669.9    10920.0
GR   1669.3    10934.2     1669.0    10944.9     1669.6    10955.9     1669.2    10971.6     1669.1    10994.4
GR   1668.9    10994.5     1667.8    11002.9     1666.3    11011.0     1665.7    11016.6     1667.3    11022.7
GR   1667.0    11032.8     1667.7    11039.7     1668.4    11049.8     1669.6    11061.0     1670.3    11063.8
GR   1669.7    11068.4     1670.3    11078.5     1670.4    11082.0

NC      .03        .03        .03        .3         .5
        BEGIN SUN VALLEY PARKWAY CULVERT (1-10'X 3'X 134' RCB; STRUC.NO 3)
X1   14.009         6     9994.5    10005.5         45         45         45
X3       10                                                          1670.7     1670.7
GR    1671       9940       1670     9994.5     1666.7     9994.5     1666.7    10005.5       1670    10005.5
GR   1670.5      10060

NC    .012       .012       .012
SC   1.012         .2        3.0          0          3         10        134       12.1     1667.7     1666.7
        END CULVERT (STRUC. #3).  NO WEIR FLOW EXPECTED.
X1   14.034         6     9994.5    10005.5        134        134        134
X2                             2     1670.7     1672.0
X3       10                                                          1672       1672
BT        8       9900    1674.65                10000     1674.1               10021.9     1673.9
BT    10022     1673.4                10062     1672.6                10069     1672.2                10085
BT     1672                10188       1673
GR     1672       9982       1671     9994.5     1667.7     9994.5     1667.7    10005.5       1671    10005.5
GR     1672      10025

NC      .03        .03        .03
X1   14.042         7       9996     10010         40         40         40
GR     1673       9976       1672      9988       1670       9996       1669       9998       1669      10002
GR     1671      10010       1672     10030
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


XPROF 1

CCHV=     .100 CEHV=     .300
*SECNO  .080

3265 DIVIDED FLOW

        FLOODWAY MODEL WITH FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
        EQUAL CONVEYANCE REDUCTION (METHOD 4) FOR INITIAL ANALYSIS.
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE-AREA METHOD
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH 5 WEST ALONG BASELINE
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
      .080      7.33   1504.13       .00   1504.13   1504.61       .48       .00       .00   1501.20
    2731.0     634.4    1804.8     291.8     273.9     277.4      90.5        .0        .0   1501.50
      .00      2.32      6.60      3.23      .054      .042      .054      .000   1496.80   9830.39
   .004073        0.        0.        0.         0         0         0       .00    339.98  10232.51


*SECNO  .216
      .216      7.36   1506.96       .00       .00   1507.37       .40      2.75       .01   1505.00
    2731.0     260.9    2027.1     443.0     131.0     349.0     244.9      11.7       6.6   1504.80
      .04      1.99      5.81      1.31      .054      .042      .054      .000   1499.10   9820.18
   .003321      700.      750.      800.         2         0         0       .00    426.01  10246.19


*SECNO  .359
        CROSS-SECTION UPSTREAM OF CONFLUENCE WITH WASH NO.3, DECREASE DISCHARGE.
      .359      7.70   1509.50       .00       .00   1509.77       .27      2.39       .01   1507.90
    2157.0      62.9    2061.8      32.3      39.0     482.5      23.3      23.8      12.2   1507.80
      .10      1.61      4.27      1.39      .054      .042      .054      .000   1501.80   9756.56
   .002361      550.      850.      775.         2         0         0       .00    177.99   9934.55


*SECNO  .503

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
      .503      7.79   1513.09   1513.09       .00   1513.96       .87      3.77       .18   1510.20
    2157.0     549.8    1283.0     304.2     125.9     141.3     102.0      32.9      15.9   1511.50
      .13      4.52      9.08      2.90      .054      .042      .054      .000   1505.30   9959.65
   .010432      750.      900.      800.         9         5         0       .00    208.85  10168.50


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


*SECNO  .634
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3248 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVTNB

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.18

.636	9.13	1517.53	.00	.00	1517.76	.23	3.75	.06	1514.40
2157.0	307.6	950.4	899.9	144.0	179.9	403.6	44.0	21.6	1513.90
.21	2.14	3.29	2.23	.054	.042	.054	.000	1508.40	10034.39
.002191	740.	980.	900.	5	0	0	.00	364.57	10438.79

*SECNO .778

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .54

.778	8.12	1520.02	.00	.00	1520.68	.66	2.79	.13	1518.10
2157.0	310.6	1445.5	400.8	95.6	192.1	162.7	53.6	26.2	1518.10
.24	3.25	7.52	3.87	.054	.042	.054	.000	1511.90	9935.92
.007578	770.	760.	730.	3	0	0	.00	169.40	10105.32

*SECNO .964

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.84

.964	7.96	1524.36	.00	.00	1524.56	.20	3.83	.05	1521.60
2157.0	199.8	1096.3	860.9	87.1	247.0	361.8	66.1	31.1	1522.10
.32	2.29	4.44	2.38	.054	.042	.054	.000	1516.40	9861.55
.002248	1010.	1050.	950.	4	0	0	.00	262.73	10124.28

*SECNO 1.112

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .49

1.112	5.01	1527.41	.00	.00	1527.80	.39	3.19	.06	1526.10
2157.0	1433.1	680.0	43.9	381.4	96.8	16.4	76.9	36.1	1526.10
.37	3.76	7.02	2.68	.054	.042	.054	.000	1522.40	9852.90
.009267	775.	800.	800.	3	0	0	.00	295.69	10148.60

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

*SECNO 1.220

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

1.220	4.00	1530.90	.00	.00	1531.06	.17	3.24	.02	1528.10
2157.0	1126.3	807.1	223.6	371.6	211.9	101.5	85.2	40.4	1529.30
.42	3.03	3.81	2.20	.054	.042	.054	.000	1524.90	9778.90
.003368	600.	650.	600.	2	0	0	.00	314.60	10093.50

*SECNO 1.377

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

CROSS-SECTION UPSTREAM OF CONFLUENCE WITH WASH NO.2, DECREASE DISCHARGE.

1.377	4.36	1533.56	.00	.00	1533.65	.09	2.58	.01	1532.10
912.0	181.9	574.0	156.1	119.2	207.8	104.1	95.6	46.7	1532.00
.52	1.53	2.76	1.50	.050	.050	.050	.000	1529.20	9905.93
.002801	810.	810.	810.	3	0	0	.00	361.90	10267.83

*SECNO 1.490

243RD AVENUE AT-GRADE ROAD CROSSING 120 FT. DOWNSTREAM OF THIS SECTION.

1.490	2.36	1535.26	.00	.00	1535.32	.07	1.67	.00	1533.50
912.0	270.0	486.6	155.3	146.5	203.8	102.8	101.9	51.7	1533.80
.60	1.84	2.39	1.51	.050	.050	.050	.000	1532.90	9907.67
.002584	600.	630.	630.	3	0	0	.00	353.33	10261.00

*SECNO 1.636

1.636	2.99	1537.88	.00	.00	1537.96	.10	2.64	.01	1537.60
912.0	82.5	498.7	130.7	52.6	258.5	75.4	109.3	58.1	1537.40
.69	1.57	2.72	1.73	.050	.050	.050	.000	1534.90	9822.91
.004785	770.	770.	770.	4	0	0	.00	365.33	10188.24

*SECNO 1.778

3265 DIVIDED FLOW

1.778	4.26	1540.76	.00	.00	1540.84	.09	2.86	.00	1539.90
912.0	141.6	559.5	210.9	88.3	206.9	138.3	116.3	64.6	1540.10
.78	1.60	2.70	1.52	.050	.050	.050	.000	1536.50	9850.90
.003110	750.	750.	750.	3	0	0	.00	385.04	10244.92

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

*SECNO 1.893

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

STOCK POND AND LEVEE UPSTREAM OF THIS SECTION.
PRIVATE LEVEE IS OVERTOPPED OR WITHOUT ADEQUATE FREEBOARD (I.E. 3 FT.)
AT SOUTH END. LEVEE ASSUMED BREACHED FOR THIS ANALYSIS.

1.893	1.42	1543.82	.00	.00	1543.83	.11	2.79	.01	1542.70
912.0	143.0	525.5	243.5	54.3	205.2	87.6	121.6	69.6	1542.40
.84	2.63	2.56	2.78	.050	.050	.050	.000	1542.10	9778.76
.008005	600.	600.	560.	3	0	0	.00	364.98	10143.74

*SECNO 2.004

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

2.004	1.39	1547.79	1547.55	.00	1547.84	.05	4.20	.01	1547.20
349.0	110.3	36.9	181.8	69.8	23.5	105.0	125.1	74.3	1547.60
.93	1.58	2.42	1.73	.049	.045	.049	.000	1546.40	9812.02
.006340	730.	360.	450.	19	14	0	.00	377.69	10189.71

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*SECNO 2.126

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3720 CRITICAL DEPTH ASSUMED
     2.126      1.59   1553.89   1553.89       .00   1554.17       .28      7.53       .07   1553.20
     349.0      84.0     136.1     128.9      29.5      26.0      34.2     127.2      78.6   1553.60
       .97      2.05      5.23      3.76      .049      .045      .049      .000   1552.30   9902.06
   .028846      625.      640.      650.        20        11         0       .00    174.90  10110.50


*SECNO 2.244

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.53

     2.244      2.27   1560.17       .00       .00   1560.19       .02      6.00       .03   1559.90
     349.0     192.9      38.7     117.4     171.4      20.4     112.5     130.2      87.3   1560.30
      1.12      1.13      1.90      1.04      .049      .045      .049      .000   1557.90   9434.21
   .004490      650.      650.      650.        18         0         0       .00    993.64  10549.19


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


*SECNO 2.379

3265 DIVIDED FLOW


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

     2.379      2.58   1566.38   1566.38       .00   1566.52       .15      6.29       .04   1566.10
     349.0     239.6      82.0      27.4     101.7      17.2      12.9     133.0      99.5   1566.90
      1.19      2.36      4.76      2.12      .049      .045      .049      .000   1563.80   9426.07
   .023890      720.      720.      720.        11        12         0       .00    489.71  10108.97


*SECNO 2.501

3265 DIVIDED FLOW


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

     2.501      1.73   1572.73       .00       .00   1572.75       .02      6.21       .01   1572.00
     179.4     113.1      34.5      31.8     122.8      26.0      30.5     136.1     107.6   1573.40
      1.37       .92      1.33      1.04      .049      .045      .049      .000   1571.00   9353.75
   .003165      660.      660.      660.         6         0         0       .00    571.10  10103.17


*SECNO 2.630

3265 DIVIDED FLOW
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7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.630       .99   1578.69   1578.69       .00   1578.89       .20      4.95       .05   1579.90
    179.4     143.8      35.6        .0      38.3      14.1        .0     137.9     113.1   1572.90
     1.43      3.76      2.57       .00      .049      .045      .000      .000   1577.70   9348.56
  .031238      680.      680.      680.         7        14         0       .00    135.97  10055.20


*SECNO 2.758

3265 DIVIDED FLOW

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


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


3470 ENCROACHMENT STATIONS=     9364.5   10245.6  TYPE=      1  TARGET=      881.100
       251ST AVENUE AT-GRADE ROAD CROSSING 100 FT. UPSTREAM OF THIS SECTION.
    2.758      1.16   1586.36       .00       .00   1586.30       .03      7.39       .02   1587.00
    179.4     121.6       9.3      48.5      81.2       6.8      35.3     139.3     116.5   1586.90
     1.55      1.50      1.36      1.37      .049      .045      .049      .000   1585.10   9372.38
  .005580      660.      700.      700.        10         0         0       .00    308.67  10195.55


*SECNO 2.892

3265 DIVIDED FLOW


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

    2.892      1.19   1593.09       .00       .00   1593.18       .09      6.86       .02   1593.30
    179.4     131.8      33.6      14.1      53.2      14.8      12.1     140.9     121.7   1593.30
     1.64      2.48      2.26      1.16      .049      .045      .049      .000   1591.90   9760.94
  .021548      700.      700.      700.         6         0         0       .00    332.05  10311.93


*SECNO 3.017

3265 DIVIDED FLOW


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

    3.017      2.13   1599.73       .00       .00   1599.78       .05      6.60       .00   1600.10
    140.7       2.2      52.6      85.9       5.0      30.8      47.7     142.2     125.8   1599.80
     1.74       .45      1.71      1.80      .049      .045      .047      .000   1597.60   9684.52
  .004976      680.      680.      640.         5         0         0       .00    207.17  10322.49


*SECNO 3.151

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
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SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3720 CRITICAL DEPTH ASSUMED
  3.151     1.01   1608.31   1608.31      .00   1608.38      .07      6.23      .01   1608.20
  140.7     22.7      60.1      57.9     15.9      20.3     47.2     143.5     131.7   1608.40
   1.84     1.43      2.97      1.22     .049      .045     .049      .000   1607.30   9737.33
 .019488     720.      720.      700.        5        12        0       .00    526.69  10612.85


*SECNO 3.281

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.61

  3.281     1.19   1615.79       .00       .00   1615.84      .05      7.46      .00   1615.80
  140.7       .0      37.9     102.8        .0      16.6     68.0     144.8     137.4   1617.50
   1.95      .00      2.28      1.51      .000      .045     .049      .000   1614.60  10014.91
 .007498     700.      680.      630.         7         0        0       .00    239.07  10771.01


*SECNO 3.408

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  3.408     1.55   1624.75   1624.75      .00   1624.92      .17      8.69      .04   1625.80
  140.7       .0       5.4     135.3        .0       2.8     40.2     145.8     140.2   1625.70
   2.01      .00      1.97      3.37      .000      .045     .049      .000   1623.20   9929.33
 .026527     680.      680.      680.         6        11        0       .00    124.22  10745.42


*SECNO 3.547

3265 DIVIDED FLOW


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

  3.547      .87   1633.97       .00       .00   1634.00      .03      9.07      .01   1635.00
  102.0      2.3       2.3     97.4       1.8       1.7     67.1     146.7     142.7   1633.60
   2.15     1.30      1.38      1.41      .049      .045     .049      .000   1633.10   9947.16
 .006156     740.      750.      720.         9         0        0       .00    194.25  10845.93
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SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO 3.631
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3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    3.621      .52   1640.32   1640.32      .00   1640.40      .08      6.01      .02   1640.30
    102.0      1.9      30.0      70.0      1.2      10.1      38.0     147.4     145.4   1640.70
     2.20     1.57      2.96      1.94     .049      .045      .049      .000   1639.80   9966.91
  .044520     450.      450.      460.        5        14         0       .00    322.72  10627.13


%SECNO 3.761

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.71

    3.761     1.30   1649.20       .00       .00   1649.27       .06      8.86       .00   1650.00
    102.0       .0      25.7      76.3       .0      11.7      38.6     148.1     148.5   1650.80
     2.30      .00      2.20      1.98      .000      .045      .049      .000   1647.90   9999.31
  .006109     680.      680.      680.         8         0         0       .00     73.46  10424.87


%SECNO 3.887

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    3.887     1.44   1657.74   1657.74      .00   1658.02      .28      6.38      .06   1657.90
    102.0     13.5      88.5       .0       8.0      19.8       .0     148.7     149.5   1658.10
     2.34     1.70      4.47       .00      .049      .045      .000      .000   1656.30   9966.45
  .019340     700.      690.      600.        5         8         0       .00     54.72  10033.89


%SECNO 4.055

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

    4.055     1.81   1667.71       .00       .00   1667.84      .14      9.81      .01   1666.90
    102.0     12.8      85.9      3.2       7.6      27.3      2.6     149.4     150.5   1667.00
     2.43     1.70      3.15      1.22      .049      .045      .049      .000   1665.90   9986.37
  .006517     940.      940.      940.         7         0         0       .00     42.30  10028.67


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


CCHV=     .300 CEHV=     .500
%SECNO 4.066
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1672.70 ELREA=      1672.70

        BEGIN 3-49"X33" C.S.P.A. CULVERTS UNDER SUN VALLEY PARKWAY (STRUC.#2)
    4.066     1.10   1669.00   1669.00      .00   1669.54      .54       .34      .20   1667.94
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```
    102.0        .0      102.0        .0        .0      17.2        .0     149.5     150.5   1667.90
     2.43       .00       5.92       .00      .000      .030      .000      .000   1667.90   9992.00
  .012966       60.       60.        60.        20        14         0       .00     16.00  10008.00


SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1668.58 , NOT    1669.00 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      CDFD      RDLEN     BWC       BWP       BAREA     SF        ELCHU     ELCHD
    1.25      4.83      2.63       .00     16.00      6.50     26.10       .00   1669.07   1667.74

XSECNO 4.094

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  9.73

CLASS B LOW FLOW

3420 BRIDGE W.S.=    1670.03 BRIDGE VELOCITY=       7.02     CALCULATED CHANNEL AREA=        9.

 ESPRS     EGLNC      HS       CWEIR     DLOW      BAREA   TRAPEZOID     ELLC     ELTRD     WEIRLN
                                                            AREA
      .00  1671.62     .00        0.      102.       26.       26.    1671.82   1672.70        0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1672.70 ELREA=      1672.70

       END CULVERTS (STRUC. #2).
    4.094     2.45   1671.52      .00       .00   1671.62       .11      2.08       .00   1669.07
    102.0       .0     102.0       .0        .0      38.9        .0     149.5     150.6   1669.10
     2.45      .00      2.62      .00      .000      .012      .000      .000   1669.07   9992.00
  .000137      146.      146.     146.         0         0         0       .00     16.00  10008.00


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  06MAY93      11:26:25                                                                          PAGE   26


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


XSECNO 4.101

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .34

       FLOODPLAIN\FLOODWAY DELINEATED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
       FLOW LIMITS IS POSSIBLE AND PRESERVATION OF DETENTION UPSTREAM OF ROAD
       IS REQUIRED.
    4.101     1.58   1671.58      .00       .00   1671.65       .07       .01       .01   1670.00
    102.0     18.6     72.4     11.6      12.5      34.7       8.1     149.6     150.6   1670.00
     2.46     1.43     2.29     1.43      .030      .030      .030      .000   1670.00   9974.17
  .001153       40.      40.      40.         2         0         0       .00     44.13  10020.79


CCHV=     .100 CEHV=     .300
XSECNO -2.379
START TRIB COMP
    -2.379     2.379  1566.377

3265 DIVIDED FLOW
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7185 MINIMUM SPECIFIC ENERGY

REPEAT CROSS-SECTION FOR START OF WASH 1 TRIBUTARY ANALYSIS

-2.379	2.58	1566.38	1566.36	.00	1566.52	.15	5.30	-5.30	1566.10
349.0	239.6	92.0	27.4	101.5	17.2	12.9	151.1	155.1	1566.90
2.52	2.36	4.76	2.13	.049	.045	.049	.000	1563.80	9424.06
.023959	720.	720.	720.	0	14	0	.00	489.32	10108.87

*SECNO 12.510

ADD 10 TO CROSS-SECTION I.D. NO. FOR TRIBUTARY. I.D. NUMBER IN RIVER MILES ALONG TRIBUTARY BASELINE. STATION 10175 = TRIB. BASELINE.

12.510	1.63	1573.13	.00	.00	1573.16	.03	6.62	.01	1572.90
131.9	13.8	35.2	82.9	12.3	20.8	62.7	152.8	159.8	1572.40
2.66	1.13	1.69	1.32	.049	.045	.049	.000	1571.50	10148.43
.002633	660.	700.	650.	8	0	0	.00	136.67	10285.11

*SECNO 12.639

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

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STATION 10535 = TRIB. BASELINE.

12.639	.70	1578.80	1578.80	.00	1578.92	.12	4.63	.03	1579.50
131.9	118.2	13.7	.0	42.5	4.8	.0	153.9	162.5	1579.90
2.72	2.78	2.84	.00	.049	.045	.000	.000	1578.10	10327.09
.045966	700.	700.	620.	6	12	0	.00	209.93	10625.67

*SECNO 12.761

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.15

STATION 10940 = TRIB. BASELINE.

12.761	2.10	1585.70	.00	.00	1585.72	.03	6.60	.01	1585.60
131.9	105.5	17.5	8.9	90.5	9.7	7.1	153.1	166.7	1585.50
2.86	1.17	2.00	.98	.049	.045	.049	.000	1583.60	10440.31
.004627	625.	720.	650.	13	0	0	.00	367.83	10968.19

*SECNO 12.904

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

STATION 11295 = TRIB. BASELINE.

12.904	1.64	1593.34	1593.34	.00	1593.45	.11	6.93	.03	1593.50
131.9	114.3	12.0	5.5	43.0	4.2	2.6	154.5	172.3	1593.40
2.94	2.66	2.83	2.13	.049	.045	.049	.000	1591.70	10807.40
.024775	770.	770.	740.	7	17	0	.00	268.40	11345.05

*SECNO 13.023

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.80

STATION 11695 = TRIB. BASELINE.

13.023	.62	1599.62	.00	.00	1599.63	.02	6.17	.01	1579.60
105.6	100.5	5.1	.0	99.5	4.0	.0	157.5	176.9	1600.00
3.11	1.01	1.28	.00	.049	.045	.000	.000	1598.80	11213.31
.004904	600.	625.	625.	9	0	0	.00	396.85	11695.85

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

*SECNO 13.170

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

STATION 11735 = TRIB. BASELINE.

13.170	.90	1609.00	1609.00	.00	1609.22	.22	7.08	.06	1609.10
105.6	96.3	9.3	.0	25.1	3.4	.0	158.6	180.5	1609.20
3.16	3.84	2.72	.00	.049	.045	.000	.000	1608.10	11396.52
.033967	675.	850.	825.	4	8	0	.00	65.41	11738.56

*SECNO 13.277

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.13

STATION 11640 = TRIB. BASELINE.

13.277	1.76	1616.86	.00	.00	1616.92	.05	7.68	.02	1617.30
105.6	91.5	13.4	.8	50.4	7.0	1.3	159.1	182.3	1616.80
3.24	1.82	1.90	.60	.049	.045	.049	.000	1615.10	11168.29
.007452	550.	600.	575.	5	0	0	.00	211.00	11667.39

*SECNO 13.408

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

STATION 11375 = TRIB. BASELINE.

13.408	2.56	1626.56	1626.56	.00	1626.75	.19	6.34	.04	1626.40
105.6	15.8	78.6	11.2	12.9	19.5	8.7	159.9	185.0	1626.60
3.30	1.22	4.04	1.29	.049	.045	.049	.000	1624.00	10934.96
.011128	700.	710.	680.	4	15	0	.00	128.27	11497.35

*SECNO 13.536

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

```
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3265 DIVIDED FLOW

        STATION 11205 = TRIB. BASELINE.
   13.536      1.46   1634.86       .00       .00   1634.94       .07      8.17       .01   1635.00
    79.3      43.3      25.6      10.4      25.4       9.0       5.9     160.6     186.9   1635.00
    3.40      1.71      2.84      1.78      .049      .045      .049      .000   1633.40  11004.72
  .011648     690.      750.      675.         3         0         0       .00    116.13  11331.00


*SECNO 13.616

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    11016.6   11329.0  TYPE=      1  TARGET=      312.400
        STATION 11215 = TRIB. BASELINE.
        BASED ON FLOW DISTRIBUTION FOR THIS SECTION APPROX. 14.7 CFS SPLITS
        FROM TRIBUTARY AND JOINS MAIN WASH #1 DOWNSTREAM OF THIS SECTION.
   13.616      1.72   1640.12       .00       .00   1640.30       .18      5.33       .03   1638.80
    94.0      42.2      50.4       1.5      16.3      12.5       1.9     160.9     187.8   1640.60
    3.44      2.39      4.01       .77      .049      .045      .049      .000   1638.40  11115.97
  .012474     440.      450.      400.         4         0         0       .00     56.90  11263.56


FLOW DISTRIBUTION FOR SECNO=     13.62          CWSEL=   1640.12

STA=   11116.   11120.   11126.   11203.   11216.   11228.   11261.   11264.
  PER Q=      5.9      8.7       .7     29.6     53.6      1.3       .3
   AREA=      2.3      3.4       .2      9.8     12.5      1.5       .3
    VEL=      2.4      2.4       .8      2.9      4.0       .8       .8
  DEPTH=       .5       .6       .0       .8      1.2       .0       .1

*SECNO 13.743

3265 DIVIDED FLOW

        STATION 11115 = TRIB. BASELINE.
   13.743      1.63   1648.13       .00       .00   1648.28       .14      7.47       .00   1647.40
    94.0       6.8      48.0      39.2       4.8      13.0      17.1     161.4     188.7   1647.80
    3.50      1.44      3.68      2.29      .049      .045      .049      .000   1646.50  11002.49
  .011872     650.      660.      650.         5         0         0       .00     68.22  11200.86


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   06MAY93      11:24:25                                                                          PAGE   30


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


*SECNO 13.875

3265 DIVIDED FLOW

        STATION 11245 = TRIB. BASELINE.
   13.875      2.01   1656.91       .00       .00   1657.10       .19      8.81       .01   1657.20
    94.0      15.1      78.9        .0       8.0      21.2        .0     161.9     187.8   1656.70
    3.35      1.88      3.72       .00      .049      .045      .000      .000   1654.70  11120.05
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  .013052      640.      725.      690.        4        0        0      .00     41.25  11290.50


*SECNO 14.000
        STATION 11025 = TRIB. BASELINE.
   14.000      1.80   1667.30   1667.47      .00   1667.83      .34     10.69      .04   1666.30
     94.0      11.2      73.7       9.1      3.9      14.5      4.7     162.4    190.2   1667.30
     3.60      2.89      5.09      1.93     .049     .045     .049      .000   1665.70  11004.53
  .018361       690.      700.      640.        7       15        0      .00     33.15  11037.71


CCHV=     .300 CEHV=     .500
*SECNO 14.009

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1670.70 ELREA=      1670.70

        BEGIN SUN VALLEY PARKWAY CULVERT (1-10'X 3'X 134' RCB; STRUC.NO 3)
   14.009      1.38   1668.08      .00      .00   1668.68      .60      .71      .13   1670.00
     94.0        .0      94.0       .0       .0      15.2       .0    162.4    190.2   1670.00
     3.60       .00      6.30      .00     .000     .030     .000     .000   1666.70   9994.50
  .013766       45.       45.       45.        2        0        0      .00     11.00  10005.50


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     CDFD      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    1          .012      .20      3.00      .00      3.00      10.00     134.00    12        1       1667.70   1666.70

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 14.034

SPECIAL CULVERT OUTLET CONTROL
EEIC =   1669.914  EEOC =   1669.940  PCWSE=   1669.979  ELTRD=   1672.000


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.23

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


SPECIAL CULVERT

     EEIC      EEOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
   1669.91   1669.94      1.26       0.       94.     4.380      30.0   1672.00        0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1672.00 ELREA=      1672.00

        END CULVERT (STRUC. #3).  NO WEIR FLOW EXPECTED.
   14.034      1.94   1669.64      .00      .00   1669.94      .30      1.26      .00   1671.00
     94.0        .0      94.0       .0       .0      21.5       .0    162.4    190.2   1671.00
     3.61       .00      4.38      .00     .000     .012     .000     .000   1667.70   9994.50
  .000769      134.      134.      134.        2        0        0      .00     11.00  10005.50
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*SECNO 14.042
3835 20 TRIALS ATTEMPTED WSEL,DWSEL
3873 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   14.042      1.73   1670.73   1670.73       .00   1671.26       .54       .08       .12   1670.00
     94.0       2.7      91.1        .0       1.1      15.3        .0     162.4     190.2   1671.00
     3.61      2.71      5.95       .00      .030      .030      .000      .000   1669.00   9973.10
  .012035       40.       40.       40.        29        11         0       .00     15.80  10008.90


1
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T1      SUN VALLEY PARKWAY NORTH FIS   CONTRACT:FCDMC NO. 90-04  FILE:SEE PG. 1
T2      100-YEAR WATER SURFACE PROFILE                    A-N WEST INC. PHX.AZ
T3      WASH #1 FLOODWAY

J1  ICHECK    INO       NINV      IDIR      STRT      METRIC    NVINS     Q         WSEL      FQ

    -10        3                            0                                   1505.13

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLOC     IBW       CHNIM     ITRACE

    15                   -1

1
  06MAY93      11:26:25                                                                          PAGE   33


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


*PROF 2
0

SCHV=     .100 CEHV=     .300
*SECNO  .080

3470 ENCROACHMENT STATIONS=    10086.7   10186.4  TYPE=      1  TARGET=       99.730
       FLOODWAY MODEL WITH FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
       EQUAL CONVEYANCE REDUCTION (METHOD 4) FOR INITIAL ANALYSIS.
       STARTING WATER SURFACE ELEVATION BASED ON SLOPE-AREA METHOD
       CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
       CONFLUENCE WITH WASH 5 WEST ALONG BASELINE
       CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
       STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
     .080      8.33   1505.13       .00   1504.13   1505.78       .65       .00       .00   1501.20
   2731.0     475.0    2256.0        .0     136.0     326.4        .0        .0        .0 100000.00
     .00      3.49      6.91       .00      .054      .042      .000      .000   1496.80  10086.67
  .003842        0.        0.        0.         0         0         0       .00     99.73  10186.40


*SECNO  .216

3470 ENCROACHMENT STATIONS=     9929.7   10016.6  TYPE=      1  TARGET=       86.893
     .216      8.75   1507.85       .00   1506.96   1508.44       .59      2.66       .01   1505.00
   2731.0        .0    2592.6     138.4        .0     411.1      47.9       7.9       1.6   1504.50
     .03       .00      6.31      2.90      .000      .042      .054      .000   1499.10   9929.70
  .003313      700.      750.      800.         2         0         0       .00     86.90  10016.60


*SECNO  .359
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3470 ENCROACHMENT STATIONS=     9787.1    9908.5  TYPE=      1  TARGET=      121.400
        CROSS-SECTION UPSTREAM OF CONFLUENCE WITH WASH NO.3, DECREASE DISCHARGE.
      .359      8.41   1510.21       .00   1509.50   1510.43       .22      1.96       .04   1507.90
    2157.0        .0    2157.0        .0        .0     548.1        .0      17.9       3.6 100000.00
      .10       .00      3.90       .00      .000      .042      .000      .000   1501.80   9787.10
  .001575      850.      850.      775.         2         0         0       .00    121.40   9908.50


*SECNO  .303

3301 HV CHANGED MORE THAN HVINS

1
  06MAY93      11:26:25                                                                                                PAGE   34


    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        DLOSS     L-BANK ELEV
    Q         DLOB      DCH       DROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     COPAR     TOPWID    ENDST


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

3470 ENCROACHMENT STATIONS=    10000.0   10100.0  TYPE=      1  TARGET=      100.000
      .503      8.03   1513.33   1513.33   1513.09   1514.57      1.25      3.00       .31   1510.20
    2157.0     379.1    1513.0     265.9      66.7     148.7      85.9      24.4       5.8   1511.50
      .12      5.67     10.17      4.04      .054      .042      .054      .000   1505.30  10000.00
  .012219      750.      900.      800.        20        10         0       .00    100.00  10100.00


*SECNO  .636

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=    10110.0   10255.0  TYPE=      1  TARGET=      145.000
      .636      9.82   1518.22       .00   1517.53   1518.51       .29      3.84       .10   1514.40
    2157.0      85.4    1093.2     978.5      30.7     199.5     355.3      35.5       8.3   1513.90
      .19      2.78      5.48      2.75      .054      .042      .054      .000   1508.40  10110.00
  .002051      740.      980.      900.         5         0         0       .00    145.00  10255.00


*SECNO  .778

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9994.3   10059.7  TYPE=      1  TARGET=       65.400
      .778      8.58   1520.48       .00   1520.02   1521.70      1.22      2.91       .29   1518.10
    2157.0      56.1    1960.3     140.5      14.4     213.3      31.5      42.8      10.1   1518.10
      .21      3.91      9.19      4.46      .054      .042      .054      .000   1511.90   9994.30
  .009829      770.      760.      750.         3         0         0       .00     65.40  10059.70


*SECNO  .964
1
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SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         OLOB      OCH       OROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.30


3470 ENCROACHMENT STATIONS=     9897.7   10036.0  TYPE=      1  TARGET=      138.300
     .964      8.87   1525.27      .00   1524.36   1525.51      .25      3.72      .10   1521.60
  2157.0      35.9    1360.5     760.6      18.3     297.5     280.1      52.7     12.5   1522.10
     .28      1.96      4.57      2.72      .054      .042      .054      .000   1516.40   9897.70
 .001662     1010.     1050.      950.         3         0         0       .00    138.30  10036.00


*SECNO 1.112

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .38


3470 ENCROACHMENT STATIONS=     9989.8   10130.7  TYPE=      1  TARGET=      140.900
    1.112      5.58   1527.98      .00   1527.41   1528.76      .77      3.09      .16   1526.10
  2157.0    1149.2    1007.8        .0     229.4     114.2        .0      61.3     15.0 100000.00
     .32      5.01      8.82      .00      .054      .042      .000      .000   1522.40   9989.80
 .012649      775.      800.      800.         3         0         0       .00    140.90  10130.70


*SECNO 1.220
3280 CROSS SECTION      1.22 EXTENDED       .19 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.07


3470 ENCROACHMENT STATIONS=     9876.9   10024.1  TYPE=      1  TARGET=      147.199
    1.220      4.99   1531.88      .00   1530.90   1532.14      .25      3.33      .05   1528.10
  2157.0     887.1    1269.9        .0     249.8     294.3        .0      67.6     17.0 100000.00
     .36      3.55      4.31      .00      .054      .042      .000      .000   1526.90   9876.90
 .002905      600.      650.      600.         3         0         0       .00    147.20  10024.10


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


*SECNO 1.377
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3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .42


3470 ENCROACHMENT STATIONS=    10046.7   10135.6  TYPE=      1  TARGET=       88.899
        CROSS-SECTION UPSTREAM OF CONFLUENCE WITH WASH NO.2, DECREASE DISCHARGE.
     1.377      5.13   1534.33       .00   1533.56   1534.50       .17      2.36       .01   1532.10
     912.0        .0     912.0        .0        .0     276.2        .0      75.2      19.2 100000.00
       .43       .00      3.30       .00      .000      .050      .000      .000   1529.20  10046.70
   .002927      810.      810.      810.         4         0         0       .00     88.90  10135.60


*SECNO 1.490

3470 ENCROACHMENT STATIONS=    10038.4   10149.5  TYPE=      1  TARGET=      111.100
        243RD AVENUE AT-GRADE ROAD CROSSING 120 FT. DOWNSTREAM OF THIS SECTION.
     1.490      3.19   1536.09       .00   1535.26   1536.23       .13      1.72       .00   1533.50
     912.0      53.4    858.6        .0      22.4     289.8        .0      79.5      20.7 100000.00
       .49      2.39      2.96       .00      .050      .050      .000      .000   1532.90  10038.40
   .002560      600.      630.      630.         1         0         0       .00    111.10  10149.50


*SECNO 1.636

3470 ENCROACHMENT STATIONS=     9919.0   10087.1  TYPE=      1  TARGET=      168.100
     1.636      3.45   1538.35       .00   1537.88   1538.47       .11      2.24       .00   1537.60
     912.0        .0     912.0        .0        .0     336.8        .0      85.2      23.2 100000.00
       .57       .00      2.71       .00      .000      .050      .000      .000   1534.90   9919.00
   .003334      770.      770.      770.         2         0         0       .00    168.10  10087.10


*SECNO 1.778

3470 ENCROACHMENT STATIONS=     9946.8   10045.5  TYPE=      1  TARGET=       98.700
     1.778      4.69   1541.19       .00   1540.76   1541.40       .21      2.90       .03   1539.70
     912.0        .0     912.0        .0        .0     249.8        .0      90.3      25.4 100000.00
       .62       .00      3.65       .00      .000      .050      .000      .000   1536.50   9946.80
   .004549      750.      750.      750.         3         0         0       .00     98.70  10045.50


*SECNO 1.893
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     ES        HV        HL        QLOBS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     COPAR     TOPWID    ENDST


3470 ENCROACHMENT STATIONS=     9842.0   10059.0  TYPE=      1  TARGET=      217.000
        STOCK POND AND LEVEE UPSTREAM OF THIS SECTION.
        PRIVATE LEVEE IS OVERTOPPED OR WITHOUT ADEQUATE FREEBOARD (I.E. 3 FT.)
        AT SOUTH END.  LEVEE ASSUMED BREACHED FOR THIS ANALYSIS.
     1.893      2.02   1544.12       .00   1543.52   1544.23       .12      2.83       .01   1542.70
     912.0        .0     912.0        .0        .0     333.2        .0      94.3      27.6 100000.00
       .69       .00      2.74       .00      .000      .050      .000      .000   1542.10   9842.00
   .004880      600.      600.      560.         3         0         0       .00    217.00  10059.00


*SECNO 2.004

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .18
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3470 ENCROACHMENT STATIONS=     9934.3   10058.6  TYPE=      1  TARGET=      124.300
     2.004      1.46   1547.86   1547.80   1547.79   1548.11       .25      3.84       .04   1547.20
     349.0     110.5     121.2     117.3      29.0      25.4      35.5      97.0      29.8   1547.60
       .73      3.81      4.78      3.31      .049      .045      .049      .000   1546.40   9934.30
   .022371      750.      560.      450.        17        18         0       .00    124.30  10058.60


#SECNO 2.126

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.87


3470 ENCROACHMENT STATIONS=     9960.0   10034.0  TYPE=      1  TARGET=       74.000
     2.126      2.60   1554.90       .00   1553.89   1555.06       .16      6.74       .01   1553.20
     349.0     120.3     228.7        .0      37.8      70.3        .0      98.5      31.3 100000.00
       .78      3.18      3.26       .00      .049      .045      .000      .000   1552.30   9960.00
   .008426      625.      640.      650.         7         0         0       .00     74.00  10034.00


#SECNO 2.244
3280 CROSS SECTION      2.24 EXTENDED       .33 FEET


3470 ENCROACHMENT STATIONS=     9863.2    9974.0  TYPE=      1  TARGET=      110.800
     2.244      2.73   1560.63       .00   1560.17   1560.84       .20      5.77       .01   1559.90
     349.0     152.1     137.8      59.1      48.6      31.9      19.9     100.0      32.7   1560.30
       .83      3.13      4.32      2.98      .049      .045      .049      .000   1557.90   9863.20
   .013037      650.      650.      650.         7         0         0       .00    110.80   9974.00


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


#SECNO 2.379
3280 CROSS SECTION      2.38 EXTENDED       .60 FEET


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


3470 ENCROACHMENT STATIONS=     9958.8   10108.8  TYPE=      1  TARGET=      149.960
     2.379      3.40   1567.20   1566.87   1564.38   1567.31       .11      6.46       .01   1566.10
     349.0      31.7     119.2     198.1      18.4      35.0      65.2     102.0      34.8   1566.90
       .91      1.72      3.40      2.33      .049      .045      .047      .000   1563.30   9958.84
   .006554      720.      720.      720.        15        12         0       .00    149.96  10108.80


#SECNO 2.501

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .30


3470 ENCROACHMENT STATIONS=     9898.7    9971.0  TYPE=      1  TARGET=       72.300
     2.501      2.04   1573.04       .00   1572.73   1573.24       .20      5.90       .03   1572.00
     179.4      25.1     154.3        .0       6.6      43.3        .0     103.4      36.5 100000.00
       .96      3.79      3.56       .00      .049      .045      .000      .000   1571.00   9898.70
   .019706      660.      660.      660.         6         0         0       .00     70.52   9969.22
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%SECND 2.630

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


3470 ENCROACHMENT STATIONS=    10000.0   10059.4  TYPE=      1  TARGET=       59.400
     2.630      1.91   1579.61       .00   1578.69   1579.72       .11      6.40       .01   1576.90
     179.4        .0     179.4        .0        .0      67.7        .0     104.4      37.5 100000.00
      1.03       .00      2.69       .00      .000      .045      .000      .000   1577.70  10000.00
   .005592      680.      680.      680.         6         0         0       .00     59.40  10059.40


%SECND 2.756

3265 DIVIDED FLOW

1
   06MAY93      11:26:25                                                                                                PAGE   39


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


3280 CROSS SECTION      2.76 EXTENDED       .71 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9888.7   10043.2  TYPE=      1  TARGET=      154.510
        251ST AVENUE AT-GRADE ROAD CROSSING 100 FT. UPSTREAM OF THIS SECTION.
     2.758      1.91   1587.01   1587.01   1586.26   1587.22       .21      6.83       .03   1587.00
     179.4      75.0     104.4        .0      33.4      23.7        .0     105.3      39.1 100000.00
      1.08      3.25      4.91       .00      .049      .045      .000      .000   1585.10   9888.69
   .021905      660.      700.      700.         4         5         0       .00    145.92  10043.20


%SECND 2.892

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.99


3470 ENCROACHMENT STATIONS=     9989.0   10054.4  TYPE=      1  TARGET=       65.400
     2.892      2.08   1593.98       .00   1593.09   1594.08       .10      6.25       .01   1593.30
     179.4        .0     179.4        .0        .0      70.7        .0     106.4      40.8 100000.00
      1.16       .00      2.54       .00      .000      .045      .000      .000   1591.90   9989.00
   .005517      700.      700.      700.         8         0         0       .00     65.40  10054.40


%SECND 3.017

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


3470 ENCROACHMENT STATIONS=    10017.7   10071.5  TYPE=      1  TARGET=       53.800
     3.017      2.27   1599.57       .00   1599.73   1600.08       .21      5.97       .03   1600.10
     140.7        .0     140.7        .0        .0      38.2        .0     107.2      41.7 100000.00
      1.21       .00      3.69       .00      .000      .045      .000      .000   1597.60  10018.38
   .019716      680.      680.      640.         7         0         0       .00     53.12  10071.50


%SECND 3.151
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3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE. KRATIO = 1.52

3470 ENCROACHMENT STATIONS= 9951.0 9991.6 TYPE= 1 TARGET= 40.600

SECNO	DEPTH	DWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	OLOB	OCH	OROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
3.151	1.60	1608.90	.00	1608.31	1607.06	.16	8.97	.01	1608.20
140.7	.0	140.7	.0	.0	44.3	.0	107.9	42.5	100000.00
1.27	.00	3.18	.00	.000	.045	.000	.000	1607.30	9951.00
.008578	720.	720.	700.	4	0	0	.00	40.60	9991.60

*SECNO 3.281

3245 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 10014.9 10120.0 TYPE= 1 TARGET= 105.100

3.281	1.82	1616.42	.00	1615.79	1616.71	.29	7.62	.04	1615.80
140.7	.0	140.6	.1	.0	32.5	.3	108.5	43.1	1617.50
1.32	.00	4.33	.26	.000	.045	.049	.000	1614.60	10014.90
.015245	700.	680.	630.	3	0	0	.00	41.19	10102.20

*SECNO 3.408

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9924.0 10035.0 TYPE= 1 TARGET= 111.000

3.408	2.53	1625.73	.00	1624.75	1625.86	.13	9.13	.02	1625.80
140.7	.0	137.6	3.1	.0	46.9	3.7	109.2	44.2	1625.70
1.38	.00	2.93	.83	.000	.045	.049	.000	1623.20	9924.33
.011926	680.	680.	680.	6	0	0	.00	93.10	10035.00

*SECNO 3.547

3245 DIVIDED FLOW

3280 CROSS SECTION 3.55 EXTENDED .28 FEET

3470 ENCROACHMENT STATIONS= 9947.1 10075.0 TYPE= 1 TARGET= 127.900

3.547	1.77	1634.87	.00	1633.97	1634.96	.09	9.09	.00	1633.00
102.0	19.3	53.4	29.2	4.4	22.5	16.6	110.0	45.9	1633.60
1.47	3.01	2.38	1.76	.049	.045	.049	.000	1633.10	9947.10
.012628	740.	750.	720.	5	0	0	.00	112.56	10075.00

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

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*SECNO 3.631

3470 ENCROACHMENT STATIONS=     9967.0   10043.4  TYPE=      1  TARGET=       76.400
     3.631      .94   1640.74      .00   1640.32   1640.84      .10      5.88      .01   1640.30
     102.0     27.1      74.9       .0      13.8      27.0       .0     110.4     44.9 100000.00
      1.52     1.97      2.77      .00      .049      .045     .000      .000   1639.80   9967.00
   .013427     450.      450.     460.         5         0        0       .00     76.40  10043.40


*SECNO 3.761

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9984.1   10100.0  TYPE=      1  TARGET=      115.900
     3.761     2.14   1650.04      .00   1649.20   1650.21      .17      9.34      .02   1650.00
     102.0       .0      94.4      7.6        .0      27.8      6.8     111.0     48.1   1650.80
      1.58      .00      3.40     1.12      .000      .045     .049      .000   1647.90   9984.10
   .014067     680.      680.     680.         5         0        0       .00     72.51  10080.60


*SECNO 3.887

3470 ENCROACHMENT STATIONS=     9967.0   10033.9  TYPE=      1  TARGET=       66.900
     3.887     1.61   1657.91      .00   1657.74   1658.05      .15      7.84      .00   1657.90
     102.0     23.2      79.8       .0      15.0      23.4       .0     111.6     49.2 100000.00
      1.64     1.54      3.38      .00      .049      .045     .000      .000   1656.30   9967.00
   .009430     700.      690.     600.         5         0        0       .00     66.90  10033.90


*SECNO 4.055

3470 ENCROACHMENT STATIONS=     9987.0   10021.2  TYPE=      1  TARGET=       34.200
     4.055     1.66   1667.56      .00   1667.71   1667.76      .20      9.69      .02   1666.90
     102.0     11.4      90.6       .0       5.6      24.1       .0     112.3     50.2 100000.00
      1.72     2.02      3.75      .00      .049      .045     .000      .000   1665.90   9988.14
   .011317     940.      940.     940.         5         0        0       .00     33.06  10021.20


CCHV=     .300 CEHV=     .500
*SECNO 4.066
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
1
   06MAY93      11:26:25                                                                          PAGE   42


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


3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1672.70 ELREA=      1672.70

        BEGIN 3-49"X33" C.S.P.A. CULVERTS UNDER SUN VALLEY PARKWAY (STRUC.#2)
     4.066     1.10   1669.00   1669.00   1669.00   1669.54      .54       .73       .17   1667.94
     102.0       .0     102.0       .0        .0      17.2       .0     112.4      50.3   1667.90
      1.72      .00      5.92      .00      .000      .030     .000      .000   1667.90   9992.00
   .012966       60.       60.       60.        20        14        0       .00     16.00  10008.00
```

SPECIAL BRIDGE

5027 DOWNSTREAM ELEV IS 1668.58 , NOT 1669.00 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	CDFO	RDLEN	BWC	BWP	BAREA	SB	ELCHU	ELCHD
	1.25	4.80	2.63	.00	16.00	6.50	26.10	.00	1669.07	1667.94

*SECNO 4.094

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 9.73

CLASS B LOW FLOW

3420 BRIDGE W.S.= 1670.03 BRIDGE VELOCITY= 7.02 CALCULATED CHANNEL AREA= 9.

EGPRS	SELWC	H3	OWEIR	QLOW	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
.00	1671.62	.00	0.	102.	26.	26.	1671.62	1672.70	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1672.70 ELREA= 1672.70

END CULVERTS (STRUC. #2).

4.094	2.45	1671.52	.00	1671.52	1671.62	.11	2.08	.00	1669.07
102.0	.0	102.0	.0	.0	38.9	.0	112.4	50.3	1669.10
1.74	.00	2.62	.00	.000	.012	.000	.000	1669.07	9992.00
.000137	146.	146.	146.	0	0	0	.00	16.00	10008.00

*SECNO 4.101

1

05MAY93 11:24:25 PAGE 43

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .34

FLOODPLAIN\FLOODWAY DELINEATED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
FLOW LIMITS IS POSSIBLE AND PRESERVATION OF DETENTION UPSTREAM OF ROAD
IS REQUIRED.

4.101	1.58	1671.58	.00	1671.58	1671.65	.07	.01	.01	1670.00
102.0	18.0	72.4	11.6	12.5	31.7	8.1	112.5	50.3	1670.00
1.74	1.43	3.29	1.43	.030	.030	.030	.000	1670.00	9974.17
.001153	40.	40.	40.	2	0	0	.00	46.13	10020.29

CCHV= .100 CEHV= .300
*SECNO -2.379
START TRIB COMP
-2.379 2.379 1567.197
3290 CROSS SECTION -2.38 EXTENDED .60 FEET

3470 ENCROACHMENT STATIONS= 9958.9 10108.8 TYPE= 1 TARGET= 149.960
REPEAT CROSS-SECTION FOR START OF WASH & TRIBUTARY ANALYSIS

-2.379	3.40	1567.20	.00	1566.38	1567.31	.11	.00	.00	1566.10
349.0	31.6	119.9	198.0	18.3	35.6	84.9	114.1	52.0	1566.90
1.32	1.73	3.42	2.33	.049	.045	.049	.000	1563.80	9958.84

```
   .006633      720.      720.      720.         0         0         0       .00    149.96  10108.80


*SECNO 12.510
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10178.4   10217.2  TYPE=      1  TARGET=      38.601
       ADD 10 TO CROSS-SECTION I.D. NO. FOR TRIBUTARY.  I.D. NUMBER IN RIVER
       MILES ALONG TRIBUTARY BASELINE.   STATION 10175 = TRIB. BASELINE.
    12.510      1.54   1573.04   1573.04   1573.13   1573.38       .33      6.01       .07   1572.90
     131.9       .0      95.7      36.2        .0      19.1      10.6     115.3      53.4   1572.40
      1.86       .00      5.00      3.43      .000      .045      .049      .000   1571.50  10178.60
   .026187      660.      700.      650.        20        13         0       .00     38.60  10217.20


*SECNO 12.639
1
   06MAY93      11:26:25                                                                                PAGE   44


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



3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.39


3470 ENCROACHMENT STATIONS=    10504.2   10620.0  TYPE=      1  TARGET=     115.800
       STATION 10535 = TRIB. BASELINE.
    12.639      1.54   1579.64       .00   1578.80   1579.69       .05      6.29       .03   1579.50
     131.9      96.9      35.0        .0      53.2      17.8        .0     116.1      54.5 100000.00
      1.96      1.32      1.97       .00      .049      .045      .000      .000   1578.10  10504.20
   .004593      700.      700.      620.         6         0         0       .00     96.47  10620.00


*SECNO 12.761

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .37


3470 ENCROACHMENT STATIONS=    10903.3   10929.6  TYPE=      1  TARGET=      26.300
       STATION 10940 = TRIB. BASELINE.
    12.761      2.15   1585.75   1585.73   1585.70   1584.21       .46      6.40       .12   1585.60
     131.9      80.7      51.2        .0      15.0       9.3        .0     116.9      55.4 100000.00
      1.99      5.37      5.49       .00      .049      .045      .000      .000   1583.60  10903.30
   .033091      625.      720.      650.         9        14         0       .00     26.30  10929.60


*SECNO 12.904
3280 CROSS SECTION     12.90 EXTENDED       .04 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.54


3470 ENCROACHMENT STATIONS=    11277.3   11345.0  TYPE=      1  TARGET=      67.700
       STATION 11285 = TRIB. BASELINE.
    12.904      2.54   1594.24       .00   1593.34   1594.32       .08      8.07       .04   1593.50
     131.9      33.1      38.4      58.4      18.4      14.0      29.8     117.8      56.2   1593.40
```

```
    2.09      1.91      2.75      1.95      .049      .045      .049      .000   1591.70  11277.30
 .005134     770.      770.      740.        10         0         0       .00     67.70  11345.00


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  06MAY93      11:26:25                                                                          PAGE   45


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


*SECNO 13.023
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    11630.9   11697.7  TYPE=      1  TARGET=       66.800
       STATION 11695 = TRIB. BASELINE.
   13.023      1.30   1600.10   1600.10   1599.62   1600.31       .21      5.66       .04   1599.60
    105.6      63.9      41.7        .0      22.6       9.0        .0     118.3      57.2 100000.00
     2.14      2.92      4.65       .00      .049      .045      .000      .000   1598.80  11630.90
 .027858      600.      625.      625.         8         8         0       .00     66.80  11697.70


*SECNO 13.170
3280 CROSS SECTION     13.17 EXTENDED       .92 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.93


3470 ENCROACHMENT STATIONS=    11690.0   11739.7  TYPE=      1  TARGET=       49.700
       STATION 11735 = TRIB. BASELINE.
   13.170      1.92   1610.02       .00   1608.00   1610.13       .11      9.82       .01   1609.10
    105.6      50.5      55.1        .0      24.6      17.3        .0     118.9      58.1 100000.00
     2.22      2.05      3.18       .00      .049      .045      .000      .000   1608.10  11690.00
 .007497      675.      850.      825.         9         0         0       .00     49.70  11739.70


*SECNO 13.277
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    11606.0   11655.5  TYPE=      1  TARGET=       49.500
       STATION 11640 = TRIB. BASELINE.
   13.277      2.28   1617.39   1617.39   1616.86   1617.66       .28      7.10       .05   1617.30
    105.6      37.5      68.1        .0      12.9      14.3        .0     119.4      58.7 100000.00
     2.26      2.92      4.78       .00      .049      .045      .000      .000   1615.10  11606.00
 .023579      550.      600.      575.         8        17         0       .00     49.50  11655.50


*SECNO 13.408
3280 CROSS SECTION     13.41 EXTENDED       .17 FEET

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  06MAY93      11:26:25                                                                          PAGE   46


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

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


3470 ENCROACHMENT STATIONS=    11374.2   11389.1  TYPE=      1  TARGET=       14.899
        STATION 11375 = TRIB. BASELINE.
    13.408      2.96   1624.96       .00   1626.56   1627.23       .24      9.57       .00   1624.40
     105.6        .0     105.6        .0        .0      25.6        .0     119.8      59.3 100000.00
      2.31       .00      4.12       .00      .000      .045      .000      .000   1624.00  11374.20
   .008747      700.      710.      680.         7         0         0       .00     14.90  11389.10


*SECNO 13.536
3280 CROSS SECTION     13.54 EXTENDED       .11 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .54


3470 ENCROACHMENT STATIONS=    11195.0   11213.0  TYPE=      1  TARGET=       18.000
        STATION 11205 = TRIB. BASELINE.
    13.536      2.01   1635.41       .00   1634.86   1635.76       .35      3.50       .03   1635.00
      79.3        .8      77.5        .9        .5      16.2        .6     120.1      59.5   1635.00
      2.35      1.57      4.80      1.48      .049      .045      .049      .000   1633.40  11195.00
   .017088      690.      750.      675.         6         0         0       .00     18.00  11213.00


*SECNO 13.616
3280 CROSS SECTION     13.62 EXTENDED       .04 FEET


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


3470 ENCROACHMENT STATIONS=    11215.5   11227.9  TYPE=      1  TARGET=       12.400
        STATION 11215 = TRIB. BASELINE.
        BASED ON FLOW DISTRIBUTION FOR THIS SECTION APPROX. 14.7 CFS SPLITS
        FROM TRIBUTARY AND JOINS MAIN WASH #1 DOWNSTREAM OF THIS SECTION.
    13.616      2.57   1640.97       .00   1640.12   1641.24       .27      5.47       .01   1638.80
      94.0        .0      94.0        .0        .0      22.5        .0     120.4      59.7 100000.00
      2.38       .00      4.18       .00      .000      .045      .000      .000   1638.40  11215.50
   .009510      440.      450.      400.         0         0         0       .00     12.40  11227.90


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   06MAY93      11:26:25                                                                          PAGE   47


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


FLOW DISTRIBUTION FOR SECNO=     13.62          CWSEL=   1640.97

STA=   11216.   11228.
  PER Q=    100.0
   AREA=     22.5
    VEL=      4.2
  DEPTH=      1.8

*SECNO 13.743

3470 ENCROACHMENT STATIONS=    11112.3   11124.7  TYPE=      1  TARGET=       12.400
        STATION 11115 = TRIB. BASELINE.
```

```
   13.740      2.15   1648.68       .00   1648.13   1649.02       .36      7.75       .03   1647.40
    94.0        .0      94.0        .0        .0      19.4        .0     120.7      59.9 100000.00
    2.42       .00      4.84       .00      .000      .045      .000      .000   1646.50  11112.30
  .014955      650.     660.      650.         5         0         0       .00     12.40  11124.70


*SECNO 13.875

3470 ENCROACHMENT STATIONS=    11275.1   11296.5  TYPE=      1  TARGET=       21.400
       STATION 11245 = TRIB. BASELINE.
   13.975      2.24   1657.14       .00   1656.91   1657.34       .19      8.30       .02 100000.00
    94.0        .0      94.0        .0        .0      26.5        .0     121.1      60.2 100000.00
    2.48       .00      3.54       .00      .000      .045      .000      .000   1654.90  11275.10
  .009100      640.     725.      690.         5         0         0       .00     21.40  11296.50


*SECNO 14.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .54


3470 ENCROACHMENT STATIONS=    11011.0   11022.7  TYPE=      1  TARGET=       11.700
       STATION 11025 = TRIB. BASELINE.
   14.000      1.85   1667.55   1667.51   1667.50   1668.15       .61     10.69       .12   1666.30
    94.0        .0      94.0        .0        .0      15.0        .0     121.4      60.4 100000.00
    2.51       .00      6.25       .00      .000      .045      .000      .000   1665.70  11011.00
  .030781      690.     700.      640.         7        15         0       .00     11.70  11022.70


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  06MAY93      11:26:25                                                                          PAGE   48


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


CCHV=     .300 CEHV=     .500
*SECNO 14.009

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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1670.70 ELREA=      1670.70

       BEGIN SUN VALLEY PARKWAY CULVERT (1-10'X 3'X 134' RCB; STRUC.NO 3)
   14.009      1.72   1668.42       .00   1668.08   1668.80       .39       .58       .07   1670.00
    94.0        .0      94.0        .0        .0      18.9        .0     121.4      60.4   1670.00
    2.51       .00      4.98       .00      .000      .030      .000      .000   1666.70   9994.50
  .007070       45.      45.       45.         2         0         0       .00     11.00  10005.50


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     DOFO      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    1          .012      .20      3.00       .00      3.00     10.00    134.00     12        1       1667.70   1666.70

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 14.034

SPECIAL CULVERT OUTLET CONTROL
```

```
EGIC =   1667.914  EGOC =   1669.936  PCHGE=   1669.416  ELTRD=   1672.000


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.02

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
  1669.91   1669.94      1.14        0.       94.     4.372      30.0   1672.00        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1672.00 ELREA=      1672.00

        END CULVERT (STRUC. #3).  NO WEIR FLOW EXPECTED.
   14.034      1.94   1669.64       .00   1669.64   1667.94       .30      1.14       .00   1671.00
     94.0        .0      94.0        .0        .0      21.4        .0     121.5      60.5   1671.00
     2.52       .00      4.39       .00      .000      .012      .000      .000   1667.70   9994.50
  .000775      134.      134.      134.         2         0         0       .00     11.00  10005.50


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   06MAY93      11:26:25                                                                          PAGE   47


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


*SECNO 14.042
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   14.042      1.73   1670.73   1670.73   1670.73   1671.26       .54       .08       .12   1670.00
     94.0       2.9      91.1        .0       1.1      15.3        .0     121.5      60.5   1671.00
     2.52      2.71      5.95       .00      .030      .030      .000      .000   1669.00   9993.10
  .012030       40.       40.       40.        20        11         0       .00     15.81  10008.90


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   06MAY93      11:26:25                                                                          PAGE   50


                                                                    THIS RUN EXECUTED 06MAY93    11:30:10
**********************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.0;  February 1991
**********************************


NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST


WASH NO. 1  100-YEAR PRO

SUMMARY PRINTOUT


      SECNO        Q       CWSEL     CRIWS       VCH      XLCH      STCHL     STCHR    STENCL    STENCR      SSTA      ENDST

       .080   2731.00   1504.13       .00      6.60       .00  10173.40  10186.40       .00       .00   9830.39  10032.51
```

	.080	2731.00	1503.13	.00	6.91	.00	10133.40	10186.40	10086.67	10186.40	10086.67	10186.40
	.214	2731.00	1504.96	.00	5.81	750.00	9929.70	10000.00	.00	.00	9820.18	10246.19
	.214	2731.00	1507.85	.00	6.31	750.00	9929.70	10000.00	9929.70	10016.60	9929.70	10016.60
	.359	2157.00	1509.50	.00	4.27	850.00	9727.10	9908.50	.00	.00	9756.56	9934.55
	.359	2157.00	1510.21	.00	3.80	850.00	9787.10	9908.50	9787.10	9908.50	9787.10	9908.50
*	.503	2157.00	1513.09	1513.07	9.08	900.00	10026.10	10057.60	.00	.00	9959.65	10168.50
*	.503	2157.00	1513.33	1513.33	10.17	900.00	10026.10	10057.60	10000.00	10100.00	10000.00	10100.00
*	.636	2157.00	1517.53	.00	5.29	980.00	10118.30	10147.10	.00	.00	10034.39	10439.79
*	.636	2157.00	1518.22	.00	5.46	980.00	10118.30	10147.10	10110.00	10255.00	10110.00	10255.00
*	.778	2157.00	1520.02	.00	7.52	760.00	10000.10	10046.70	.00	.00	9935.92	10105.32
*	.778	2157.00	1520.48	.00	9.19	760.00	10000.10	10046.70	9994.30	10059.70	9994.30	10059.70
*	.964	2157.00	1524.36	.00	4.44	1050.00	9902.70	9958.00	.00	.00	9861.55	10124.28
*	.964	2157.00	1525.27	.00	4.57	1050.00	9902.70	9958.00	9897.70	10036.00	9897.70	10036.00
*	1.112	2157.00	1527.41	.00	7.02	800.00	10100.20	10130.70	.00	.00	9852.90	10149.60
*	1.112	2157.00	1527.98	.00	8.02	800.00	10100.20	10130.70	9989.80	10130.70	9989.80	10130.70
*	1.220	2157.00	1530.90	.00	3.81	650.00	9940.60	10024.10	.00	.00	9778.90	10093.50
*	1.220	2157.00	1531.89	.00	4.31	650.00	9940.60	10024.10	9876.90	10024.10	9876.90	10024.10
*	1.377	912.00	1533.56	.00	2.76	810.00	10046.70	10135.60	.00	.00	9905.93	10267.83
*	1.377	912.00	1534.33	.00	3.30	810.00	10046.70	10135.60	10046.70	10135.60	10046.70	10135.60
	1.490	912.00	1535.26	.00	2.39	630.00	10047.00	10149.50	.00	.00	9907.67	10261.00
	1.490	912.00	1536.09	.00	2.96	630.00	10047.00	10149.50	10038.40	10149.50	10038.40	10149.50

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	SECND	D	DWBEL	DRIWS	VDH	XLCH	STCHL	STCHR	STENCL	STENCR	SBTA	ENDST
	1.636	912.00	1537.88	.00	2.72	770.00	9919.00	10087.10	.00	.00	9822.91	10186.24
	1.636	912.00	1538.35	.00	2.71	770.00	9919.00	10087.10	9919.00	10087.10	9919.00	10087.10
	1.778	912.00	1540.76	.00	2.70	750.00	9946.80	10045.50	.00	.00	9850.90	10244.92
	1.778	912.00	1541.19	.00	3.65	750.00	9946.80	10045.50	9946.80	10045.50	9946.80	10045.50
*	1.893	912.00	1543.52	.00	2.56	600.00	9842.00	10059.00	.00	.00	9778.76	10143.74
	1.893	912.00	1544.12	.00	2.74	600.00	9842.00	10059.00	9842.00	10059.00	9842.00	10059.00
*	2.004	349.00	1547.79	1547.55	2.42	560.00	9973.60	10000.00	.00	.00	9812.02	10189.71
*	2.004	349.00	1547.86	1547.80	4.75	560.00	9973.60	10000.00	9934.30	10058.60	9934.30	10058.60
*	2.126	349.00	1553.89	1553.89	5.33	640.00	9984.80	10034.00	.00	.00	9902.06	10110.50
*	2.126	349.00	1554.30	.00	3.26	640.00	9984.80	10034.00	9960.00	10034.00	9960.00	10034.00
*	2.244	349.00	1560.17	.00	1.70	650.00	9922.10	9947.50	.00	.00	9434.21	10549.19
	2.244	349.00	1560.63	.00	4.32	650.00	9922.10	9947.50	9863.20	9974.00	9863.20	9974.00
*	2.379	349.00	1566.38	1566.38	4.76	720.00	9991.60	10014.90	.00	.00	9426.07	10105.87
*	2.379	349.00	1567.20	1566.57	3.40	720.00	9991.60	10014.90	9958.84	10108.80	9958.84	10108.80
*	2.501	179.40	1572.73	.00	1.33	660.00	9905.70	9971.00	.00	.00	9353.75	10103.17
*	2.501	179.40	1573.04	.00	3.56	660.00	9905.70	9971.00	9898.70	9971.00	9898.70	9969.22
*	2.630	179.40	1578.67	1578.69	2.53	680.00	10000.00	10059.40	.00	.00	9348.56	10055.20
*	2.630	179.40	1579.61	.00	2.65	680.00	10000.00	10059.40	10000.00	10059.40	10000.00	10059.40
*	2.758	179.40	1586.26	.00	1.36	700.00	10015.90	10043.20	9364.50	10245.60	9370.79	10195.53

*	2.752	179.40	1587.01	1587.01	4.41	700.00	10015.90	10043.20	9988.69	10043.20	9988.69	10043.20
*	2.892	179.40	1593.09	.00	2.26	700.00	9989.00	10054.40	.00	.00	9760.84	10211.83
*	2.892	179.40	1593.98	.00	2.54	700.00	9989.00	10054.40	9989.00	10054.40	9989.00	10054.40
*	3.017	140.70	1599.73	.00	1.71	680.00	10017.70	10071.50	.00	.00	9684.52	10322.49
*	3.017	140.70	1599.87	.00	3.69	680.00	10017.70	10071.50	10017.70	10071.50	10018.38	10071.50
*	3.151	140.70	1608.31	1608.31	2.97	720.00	9951.00	9991.60	.00	.00	9737.33	10612.85
*	3.151	140.70	1608.90	.00	3.18	720.00	9951.00	9991.60	9951.00	9991.60	9951.00	9991.60
*	3.281	140.70	1615.79	.00	2.28	680.00	10014.90	10070.60	.00	.00	10014.91	10771.01
	3.281	140.70	1616.42	.00	4.33	680.00	10014.90	10070.60	10014.90	10120.00	10014.90	10102.20
*	3.408	140.70	1624.75	1624.75	1.97	680.00	9924.00	9987.90	.00	.00	9929.33	10745.42
	3.408	140.70	1625.73	.00	2.93	680.00	9924.00	9987.90	9924.00	10035.00	9924.33	10035.00
*	3.547	102.00	1633.97	.00	1.38	750.00	9953.70	10000.00	.00	.00	9947.16	10845.93
	3.547	102.00	1634.87	.00	2.30	750.00	9953.70	10000.00	9947.10	10075.00	9947.10	10075.00
*	3.631	102.00	1640.32	1640.32	2.96	450.00	10000.00	10044.10	.00	.00	9966.91	10629.13
	3.631	102.00	1640.74	.00	2.77	450.00	10000.00	10044.10	9967.00	10043.40	9967.00	10043.40

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	SECNO	D	CWBEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	3.761	102.00	1649.20	.00	2.20	680.00	9984.10	10020.70	.00	.00	9999.31	10426.57
	3.761	102.00	1650.04	.00	3.40	680.00	9984.10	10020.70	9954.10	10100.00	9984.10	10080.60
*	3.887	102.00	1657.74	1657.74	4.47	690.00	10012.80	10035.00	.00	.00	9966.45	10033.89
	3.887	102.00	1657.91	.00	3.38	690.00	10012.80	10035.00	9967.00	10033.90	9967.00	10033.90
*	4.055	102.00	1667.71	.00	3.15	940.00	10000.00	10021.20	.00	.00	9986.37	10028.67
	4.055	102.00	1667.56	.00	3.75	940.00	10000.00	10021.20	9987.00	10021.20	9988.14	10021.20
*	4.066	102.00	1669.00	1669.00	5.92	60.00	9992.00	10008.00	.00	.00	9992.00	10008.00
*	4.066	102.00	1669.00	1669.00	5.92	60.00	9992.00	10008.00	.00	.00	9992.00	10008.00
*	4.094	102.00	1671.52	.00	2.62	146.00	9992.00	10008.00	.00	.00	9992.00	10008.00
*	4.094	102.00	1671.52	.00	2.62	146.00	9992.00	10008.00	.00	.00	9992.00	10008.00
*	4.101	102.00	1671.58	.00	2.29	40.00	9990.00	10010.00	.00	.00	9974.17	10020.29
*	4.101	102.00	1671.58	.00	2.29	40.00	9990.00	10010.00	.00	.00	9974.17	10020.29
*	-2.379	349.00	1566.38	1566.36	4.74	720.00	9991.60	10014.90	.00	.00	9424.08	10109.97
	-2.379	349.00	1567.20	.00	3.42	720.00	9991.60	10014.90	9958.54	10108.50	9958.84	10108.80
	12.510	131.90	1573.13	.00	1.69	700.00	10178.60	10199.40	.00	.00	10148.43	10285.11
*	12.510	131.90	1573.04	1573.04	5.00	700.00	10178.60	10199.40	10178.60	10217.20	10178.60	10217.20
*	12.639	131.90	1578.80	1578.80	2.94	700.00	10598.30	10636.30	.00	.00	10327.09	10625.67
*	12.639	131.90	1579.64	.00	1.97	700.00	10598.30	10636.30	10504.20	10620.00	10504.20	10620.00
*	12.761	131.90	1585.70	.00	2.00	720.00	10919.60	10927.60	.00	.00	10440.31	10965.19
*	12.761	131.90	1585.75	1585.75	5.49	720.00	10919.60	10927.60	10903.30	10929.60	10903.30	10929.60
*	12.904	131.90	1593.34	1593.34	2.89	770.00	11299.00	11310.00	.00	.00	10897.40	11345.05
*	12.904	131.90	1594.24	.00	2.75	770.00	11299.00	11310.00	11277.30	11345.00	11277.30	11345.00
*	13.023	105.60	1599.62	.00	1.29	625.00	11686.40	11697.70	.00	.00	11215.31	11695.85
*	13.023	105.60	1600.10	1600.10	4.65	625.00	11686.40	11697.70	11630.90	11697.70	11630.90	11697.70
*	13.170	105.60	1609.00	1609.00	2.72	850.00	11725.90	11739.70	.00	.00	11296.52	11738.56

*	13.170	105.60	1610.02	.00	3.18	850.00	11725.90	11739.70	11690.00	11739.70	11690.00	11739.70
*	13.277	105.60	1616.86	.00	1.90	600.00	11640.70	11655.50	.00	.00	11169.29	11667.39
*	13.277	105.60	1617.73	1617.39	4.78	600.00	11640.70	11655.50	11606.00	11655.50	11606.00	11655.50
*	13.408	105.60	1626.56	1626.56	4.04	710.00	11374.20	11389.10	.00	.00	10934.76	11497.38
*	13.408	105.60	1626.96	.00	4.12	710.00	11374.20	11389.10	11374.20	11389.10	11374.20	11389.10
	13.536	79.30	1634.86	.00	2.84	750.00	11197.00	11210.40	.00	.00	11004.72	11331.00
*	13.536	79.30	1635.41	.00	4.80	750.00	11197.00	11210.40	11195.00	11213.00	11195.00	11213.00
	13.616	94.00	1640.12	.00	4.01	450.00	11215.50	11227.90	11016.60	11329.00	11115.97	11263.56
*	13.616	94.00	1640.97	.00	4.19	450.00	11215.50	11227.90	11215.50	11227.90	11215.50	11227.90

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SECND	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SETA	ENDST
13.743	94.00	1648.13	.00	3.68	660.00	11112.30	11124.70	.00	.00	11002.49	11200.86
13.743	94.00	1648.65	.00	4.84	660.00	11112.30	11124.70	11112.30	11124.70	11112.30	11124.70
13.875	94.00	1656.91	.00	3.73	725.00	11274.10	11296.50	.00	.00	11120.05	11296.50
13.875	94.00	1657.14	.00	3.54	725.00	11274.10	11296.50	11275.10	11296.50	11275.10	11296.50
14.000	94.00	1667.50	1667.47	5.09	700.00	11011.00	11022.70	.00	.00	11004.53	11037.71
* 14.000	94.00	1667.55	1667.51	6.25	700.00	11011.00	11022.70	11011.00	11022.70	11011.00	11022.70
14.009	94.00	1668.09	.00	6.20	45.00	9994.50	10005.50	.00	.00	9994.50	10005.50
* 14.009	94.00	1668.42	.00	4.95	45.00	9994.50	10005.50	.00	.00	9994.50	10005.50
* 14.034	94.00	1669.64	.00	4.38	134.00	9994.50	10005.50	.00	.00	9994.50	10005.50
* 14.034	94.00	1669.64	.00	4.37	134.00	9994.50	10005.50	.00	.00	9994.50	10005.50
* 14.042	94.00	1670.73	1670.73	5.95	40.00	9996.00	10010.00	.00	.00	9993.10	10008.90
* 14.042	94.00	1670.73	1670.73	5.95	40.00	9996.00	10010.00	.00	.00	9993.10	10008.90

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WABH NO. 1 100-YEAR PRO

SUMMARY PRINTOUT

SECND	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPW1D	ELMIN	ALPHA
.080	634.40	1804.81	291.79	2.32	6.60	3.23	1507.90	1504.13	.00	339.98	1496.80	1.70
.080	474.96	2256.04	.00	3.49	6.91	.00	1512.80	1505.13	.00	99.73	1496.80	1.19
.216	260.89	2027.11	443.00	1.99	5.81	1.81	1511.80	1506.96	2.53	426.01	1499.10	1.83
.216	.00	2592.58	138.42	.00	6.31	2.90	1511.80	1507.85	2.72	86.90	1499.10	1.08
.359	62.86	2061.81	32.33	1.61	4.27	1.39	1517.90	1509.50	2.53	177.99	1501.80	1.12
.359	.00	2157.00	.00	.00	3.80	.00	1517.90	1510.21	2.36	121.40	1501.80	1.00
* .503	569.79	1282.98	304.24	4.52	9.08	2.98	1518.80	1513.07	3.59	208.85	1505.30	1.63
* .503	378.06	1513.00	245.94	5.67	10.17	4.04	1513.50	1513.33	3.12	100.00	1505.30	1.36
* .636	307.64	950.40	899.96	3.14	5.27	2.23	1520.70	1517.53	4.44	364.57	1508.40	1.71
* .636	85.35	1093.17	972.47	2.73	5.48	2.75	1520.70	1519.22	4.87	149.00	1508.40	1.40
* .772	310.61	1445.54	400.84	3.25	7.52	3.87	1522.40	1520.02	2.49	169.40	1511.90	1.39
* .772	56.14	1960.32	140.54	3.91	9.19	4.46	1522.40	1522.48	2.26	45.40	1511.90	1.13

*	.964	195.80	1076.31	260.88	3.29	4.44	2.38	1531.20	1524.36	4.33	262.73	1516.40	1.33
*	.964	35.92	1360.46	760.62	1.35	4.57	2.72	1531.20	1525.27	4.79	138.30	1516.40	1.21
*	1.112	1433.10	480.00	43.90	3.76	7.02	2.68	1529.60	1527.41	3.06	295.69	1522.40	1.32
*	1.112	1149.19	1007.91	.00	5.01	8.92	.00	1529.60	1527.98	2.72	140.90	1522.40	1.26
*	1.220	1126.32	807.11	223.57	3.03	3.81	2.20	1531.70	1530.90	3.48	314.60	1526.90	1.08
*	1.220	897.14	1269.36	.00	3.59	4.31	.00	1531.70	1531.86	3.90	147.20	1526.90	1.03
*	1.377	181.94	573.95	158.08	1.53	2.76	1.50	1534.90	1533.56	2.66	361.90	1529.20	1.26
*	1.377	.00	912.00	.00	.00	3.30	.00	1534.90	1534.33	2.45	88.90	1529.20	1.00
	1.490	270.04	486.62	155.34	1.84	2.39	1.51	1536.90	1535.26	1.69	353.33	1532.90	1.10
	1.490	53.43	858.57	.00	2.39	2.96	.00	1536.90	1536.09	1.76	111.10	1532.90	1.01
	1.636	82.54	698.72	130.74	1.57	2.72	1.73	1541.60	1537.88	2.62	365.33	1534.50	1.13
	1.636	.00	912.00	.00	.00	2.71	.00	1541.80	1538.35	2.26	168.10	1534.50	1.00
	1.778	141.63	559.52	210.85	1.60	2.70	1.52	1543.60	1540.76	2.88	385.04	1536.50	1.23
	1.778	.00	912.00	.00	.00	3.65	.00	1543.60	1541.17	2.84	98.70	1536.50	1.00
*	1.893	142.98	525.55	243.46	2.63	2.56	2.78	1545.80	1543.52	2.77	364.98	1542.10	1.00
	1.893	.00	912.00	.00	.00	2.74	.00	1545.80	1544.12	2.93	217.00	1542.10	1.00
*	2.004	110.31	56.92	181.77	1.58	2.42	1.73	1548.30	1547.79	4.27	377.69	1546.40	1.07
*	2.004	110.49	121.16	117.35	3.81	4.79	3.31	1549.10	1547.86	3.74	124.30	1546.40	1.07
*	2.126	83.96	136.12	128.92	2.85	5.23	3.76	1554.80	1553.89	6.10	174.90	1552.30	1.18
*	2.126	120.26	228.74	.00	3.18	3.26	.00	1555.00	1554.90	7.04	74.00	1552.30	1.00

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	SECND	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	2.244	192.91	38.71	117.38	1.13	1.90	1.04	1560.20	1560.17	6.58	993.64	1557.70	1.12
	2.244	152.07	137.80	59.13	3.13	4.32	2.98	1560.30	1560.63	5.74	110.80	1557.70	1.09
*	2.379	239.64	81.96	27.40	2.36	4.76	2.12	1566.60	1566.38	6.21	489.71	1563.80	1.35
*	2.379	31.67	119.22	198.11	1.72	3.40	2.33	1566.60	1567.20	6.56	149.96	1563.80	1.15
*	2.501	113.12	34.52	31.76	.92	1.33	1.04	1573.10	1572.73	6.35	571.10	1571.00	1.06
*	2.501	25.05	154.35	.00	3.79	3.56	.00	1573.10	1573.04	5.84	70.52	1571.00	1.00
*	2.630	143.80	35.60	.00	3.76	2.53	.00	1579.70	1578.69	5.96	135.97	1577.70	1.07
*	2.630	.00	179.40	.00	.00	2.65	.00	1579.70	1579.61	6.58	59.40	1577.70	1.00
*	2.758	121.63	9.30	46.47	1.50	1.36	1.37	1586.30	1586.36	7.37	308.67	1585.10	1.01
*	2.758	74.99	104.41	.00	2.25	4.41	.00	1586.30	1587.01	7.40	145.92	1585.10	1.36
*	2.892	131.77	33.57	14.05	2.48	2.26	1.16	1593.50	1593.09	6.83	332.05	1591.90	1.11
*	2.892	.00	179.40	.00	.00	2.54	.00	1594.20	1593.98	6.97	65.40	1591.90	1.00
*	3.017	2.23	52.61	85.86	.45	1.71	1.80	1600.40	1599.73	6.64	202.17	1597.60	1.08
*	3.017	.00	140.70	.00	.00	3.69	.00	1600.60	1599.87	5.89	53.12	1597.60	1.00
*	3.151	22.69	60.14	57.87	1.43	2.97	1.22	1608.90	1608.31	8.58	526.69	1607.30	1.65
*	3.151	.00	140.70	.00	.00	3.18	.00	1609.70	1608.90	9.03	40.60	1607.30	1.00
*	3.281	.00	37.90	102.80	.00	2.38	1.51	1617.20	1615.79	7.49	239.07	1614.60	1.11
	3.281	.00	140.63	.07	.00	4.33	.26	1617.20	1616.42	7.52	41.19	1614.60	1.01
*	3.408	.00	3.43	135.27	.00	1.97	3.37	1625.50	1624.75	8.95	124.22	1623.20	1.03
	3.408	.00	137.60	3.09	.00	2.93	.83	1626.50	1625.73	9.31	95.10	1623.20	1.09

*	3.547	2.29	2.31	97.41	1.30	1.39	1.41	1634.60	1633.97	9.23	194.25	1633.10	1.00
	3.547	19.32	53.44	29.24	3.01	2.38	1.76	1634.60	1634.87	9.14	112.56	1633.10	1.11
*	3.631	1.91	30.05	70.04	1.57	2.96	1.94	1641.40	1640.32	6.35	322.72	1639.80	1.13
	3.631	27.12	74.88	.00	1.97	2.77	.00	1641.40	1640.74	5.87	76.40	1639.80	1.07
*	3.761	.00	25.70	76.30	.00	2.20	1.98	1649.70	1649.20	8.88	73.45	1647.90	1.01
	3.761	.00	94.36	7.64	.00	3.40	1.12	1652.90	1650.04	9.30	72.51	1647.90	1.24
*	3.887	13.52	58.49	.00	1.70	4.47	.00	1658.40	1657.74	8.54	54.72	1656.30	1.31
	3.887	23.16	76.84	.00	1.54	3.38	.00	1660.60	1657.91	7.87	66.90	1656.30	1.32
*	4.055	12.93	85.94	3.23	1.70	3.15	1.22	1671.60	1667.71	9.96	42.30	1665.90	1.16
	4.055	11.42	90.58	.00	2.02	3.73	.00	1671.60	1667.56	9.65	33.06	1665.90	1.11
*	4.066	.00	102.00	.00	.00	5.92	.00	1673.50	1669.00	1.29	16.00	1667.90	1.00
*	4.066	.00	102.00	.00	.00	5.92	.00	1673.50	1669.00	1.44	16.00	1667.90	1.00
*	4.094	.00	102.00	.00	.00	2.62	.00	1674.00	1671.52	2.52	16.00	1669.07	1.00
*	4.094	.00	102.00	.00	.00	2.62	.00	1674.00	1671.52	2.52	16.00	1669.07	1.00

	BEGNO	DLOB	DCH	DROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	4.101	17.99	72.37	11.64	1.43	2.29	1.43	1675.00	1671.58	.06	46.13	1670.00	1.13
*	4.101	17.99	72.37	11.64	1.43	2.29	1.43	1675.00	1671.58	.06	46.13	1670.00	1.13
*	-2.379	239.57	82.04	27.39	2.36	4.76	2.13	1566.60	1566.38	-105.20	489.32	1563.80	1.35
	-2.379	31.56	119.42	198.02	1.73	3.42	2.33	1566.60	1567.20	-104.38	149.96	1563.80	1.15
	12.510	13.83	35.15	82.92	1.13	1.69	1.32	1573.30	1573.13	6.75	136.67	1571.50	1.05
*	12.510	.00	95.73	36.17	.00	5.00	3.45	1574.00	1573.04	5.85	38.60	1571.50	1.08
*	12.639	110.22	15.68	.00	2.78	2.84	.00	1579.50	1578.80	5.67	209.93	1578.10	1.00
*	12.639	96.92	34.98	.00	1.82	1.97	.00	1580.00	1579.64	6.59	96.47	1578.10	1.00
*	12.761	105.52	17.48	6.90	1.17	2.00	.98	1586.30	1585.70	6.90	367.83	1583.60	1.13
*	12.761	80.74	51.16	.00	5.37	5.49	.00	1586.30	1585.75	6.12	26.30	1583.60	1.00
*	12.904	114.34	12.01	5.54	2.66	2.89	2.13	1594.10	1593.34	7.65	260.40	1591.70	1.01
*	12.904	35.14	38.41	58.35	1.91	2.73	1.95	1594.20	1594.24	8.49	67.70	1591.70	1.08
*	13.023	100.53	5.07	.00	1.01	1.28	.00	1600.20	1599.62	6.28	394.85	1598.80	1.01
*	13.023	63.39	41.71	.00	2.82	4.65	.00	1600.20	1600.10	5.66	66.80	1598.80	1.20
*	13.170	96.32	9.28	.00	3.84	2.72	.00	1609.10	1609.00	9.38	63.41	1608.10	1.03
*	13.170	50.52	55.07	.00	2.05	3.13	.00	1609.10	1610.02	9.92	49.70	1608.10	1.15
*	13.277	91.48	13.36	.76	1.82	1.90	.60	1617.90	1616.86	7.86	211.00	1615.10	1.02
*	13.277	37.45	68.14	.00	2.92	4.78	.00	1617.90	1617.38	7.36	49.50	1615.10	1.17
*	13.408	15.91	79.59	11.20	1.32	4.04	1.29	1626.60	1626.56	9.67	128.27	1624.00	1.90
*	13.408	.00	105.60	.00	.00	4.12	.00	1626.80	1626.96	9.58	14.90	1624.00	1.00
	13.536	43.31	25.57	10.42	1.71	2.84	1.78	1634.90	1634.86	8.31	116.13	1633.40	1.19
*	13.536	.84	77.55	.91	1.57	4.80	1.48	1635.30	1635.41	8.44	18.00	1633.40	1.08
	13.616	42.16	50.37	1.47	2.59	4.01	.79	1640.90	1640.12	5.26	56.70	1638.40	1.24
*	13.616	.00	94.00	.00	.00	4.18	.00	1640.90	1640.97	5.56	12.40	1638.40	1.00
	13.743	6.83	47.76	39.21	1.44	3.88	2.29	1647.00	1648.13	8.01	68.22	1646.50	1.27
	13.743	.00	94.00	.00	.00	4.84	.00	1649.00	1649.65	7.68	12.40	1646.50	1.00

	13.875	15.06	79.94	.00	1.08	3.73	.00	1659.30	1656.91	8.77	41.25	1654.90	1.18
	13.875	.00	94.00	.00	.00	3.54	.00	1661.20	1657.14	8.49	21.40	1654.90	1.00
	14.000	11.19	73.68	9.13	2.89	5.09	1.93	1670.40	1667.50	10.59	33.18	1665.70	1.31
*	14.000	.00	94.00	.00	.00	6.25	.00	1670.40	1667.55	10.60	11.70	1665.70	1.00
	14.009	.00	94.00	.00	.00	6.20	.00	1670.50	1668.05	.58	11.00	1666.70	1.00
*	14.009	.00	94.00	.00	.00	4.98	.00	1670.50	1668.42	.87	11.00	1666.70	1.00
*	14.034	.00	94.00	.00	.00	4.38	.00	1672.00	1669.64	1.56	11.00	1667.70	1.00
*	14.034	.00	94.00	.00	.00	4.39	.00	1672.00	1669.64	1.22	11.00	1667.70	1.00

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CMSEL	DIFWSY	TOPWID	ELMIN	ALPHA
*	14.042	2.85	91.15	.00	2.71	5.95	.00	1672.00	1670.73	1.08	15.80	1669.00	1.05
*	14.042	2.85	91.14	.00	2.71	5.95	.00	1672.00	1670.73	1.09	15.81	1669.00	1.05

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WASH NO. 1 100-YEAR PRO

SUMMARY PRINTOUT

	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	.080	.00	.00	1504.61	.48	.00	.00	40.73	.00	7.33	54.00	42.00	54.00
	.080	.00	.00	1505.78	.65	.00	.00	38.42	.00	8.33	54.00	42.00	.00
	.216	750.00	3.07	1507.37	.40	2.75	.01	33.21	11.69	7.86	54.00	42.00	54.00
	.216	750.00	3.07	1508.44	.59	2.66	.01	33.13	7.88	8.75	.00	42.00	54.00
	.359	850.00	3.18	1509.77	.27	2.39	.01	23.61	23.84	7.70	54.00	42.00	54.00
	.359	850.00	3.18	1510.43	.22	1.96	.04	15.75	17.86	8.41	.00	42.00	.00
*	.503	900.00	3.89	1513.96	.87	3.77	.18	104.32	32.86	7.79	54.00	42.00	54.00
*	.503	900.00	3.89	1514.57	1.25	3.00	.31	122.19	26.44	8.03	54.00	42.00	54.00
*	.636	980.00	3.16	1517.76	.23	3.75	.06	21.91	43.98	9.13	54.00	42.00	54.00
*	.636	980.00	3.16	1518.51	.29	3.84	.10	20.51	35.54	9.82	54.00	42.00	54.00
*	.778	760.00	4.61	1520.68	.66	2.79	.13	75.78	53.60	8.12	54.00	42.00	54.00
*	.778	760.00	4.61	1521.70	1.22	2.91	.29	98.29	43.78	8.58	54.00	42.00	34.00
*	.964	1050.00	4.29	1524.56	.20	3.82	.05	22.48	66.08	7.94	54.00	42.00	54.00
*	.964	1050.00	4.29	1525.51	.35	3.72	.10	18.62	52.71	8.87	54.00	42.00	54.00
*	1.112	800.00	7.50	1527.80	.39	3.19	.06	92.67	76.88	5.01	54.00	42.00	54.00
*	1.112	800.00	7.50	1528.76	.77	3.09	.16	126.49	61.27	5.58	54.00	42.00	.00
*	1.220	650.00	6.92	1531.06	.17	3.24	.02	33.68	85.18	4.00	54.00	42.00	54.00
*	1.220	650.00	6.92	1532.14	.25	3.33	.05	29.05	67.62	4.98	54.00	42.00	.00
*	1.377	810.00	2.84	1533.65	.09	2.58	.01	28.01	95.56	4.36	50.00	50.00	50.00
*	1.377	810.00	2.84	1534.50	.17	2.36	.01	29.27	75.25	5.13	.00	50.00	.00
	1.490	630.00	5.87	1535.32	.07	1.67	.00	25.84	101.86	2.36	50.00	50.00	50.00
	1.490	630.00	5.87	1536.23	.13	1.72	.00	25.60	79.49	3.19	50.00	50.00	.00

	1.636	770.00	2.60	1537.98	.10	2.64	.01	47.85	107.27	2.78	50.00	50.00	50.00
	1.636	770.00	2.60	1538.47	.11	2.24	.00	33.34	85.23	3.45	.00	50.00	.00
	1.778	750.00	2.13	1540.84	.08	2.86	.00	31.10	116.31	4.76	50.00	50.00	50.00
	1.778	750.00	2.13	1541.40	.21	2.40	.03	45.49	90.28	4.57	.00	50.00	.00
*	1.893	600.00	9.33	1543.63	.11	2.79	.01	80.05	121.58	1.42	50.00	50.00	50.00
	1.893	600.00	9.33	1544.23	.12	2.83	.01	48.80	94.30	2.02	.00	50.00	.00
*	2.004	560.00	7.68	1547.84	.05	4.20	.01	63.40	125.11	1.39	49.00	45.00	49.00
*	2.004	560.00	7.68	1548.11	.25	3.84	.04	223.71	97.03	1.46	49.00	45.00	49.00
*	2.126	640.00	9.22	1554.17	.28	7.53	.07	288.46	127.23	1.59	49.00	45.00	49.00
*	2.126	640.00	9.22	1555.06	.16	6.94	.01	64.26	98.48	2.60	49.00	45.00	.00

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	BEDNO	XLCH	K*CHBL	EG	HV	HL	DLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
*	2.244	650.00	8.62	1560.19	.02	6.00	.03	44.90	130.17	2.27	49.00	45.00	49.00
	2.244	650.00	8.62	1560.84	.20	5.77	.01	130.37	100.04	2.73	49.00	45.00	49.00
*	2.379	720.00	8.19	1566.52	.15	6.29	.04	238.90	133.77	2.58	49.00	45.00	49.00
*	2.379	720.00	8.19	1567.31	.11	6.46	.01	65.54	102.01	3.40	49.00	45.00	49.00
*	2.501	660.00	10.91	1572.75	.02	6.21	.01	31.65	136.13	1.73	49.00	45.00	49.00
*	2.501	660.00	10.91	1573.24	.20	5.90	.03	197.06	103.44	2.04	49.00	45.00	.00
*	2.630	680.00	9.85	1578.89	.20	4.93	.05	312.38	137.94	.99	49.00	45.00	.00
*	2.630	680.00	9.85	1579.72	.11	6.48	.01	55.92	104.36	1.91	.00	45.00	.00
*	2.758	700.00	10.57	1586.30	.03	7.39	.02	55.80	139.29	1.16	49.00	45.00	49.00
*	2.758	700.00	10.57	1587.22	.21	6.83	.03	219.05	105.34	1.91	49.00	45.00	.00
*	2.892	700.00	9.71	1593.19	.09	6.86	.02	215.49	140.93	1.19	49.00	45.00	49.00
*	2.892	700.00	9.71	1594.08	.10	6.85	.01	55.17	106.37	2.06	.00	45.00	.00
*	3.017	680.00	8.38	1599.78	.05	6.60	.00	49.76	142.18	2.13	49.00	45.00	49.00
*	3.017	680.00	8.38	1600.08	.21	5.97	.03	197.16	107.22	2.27	.00	45.00	.00
*	3.151	720.00	13.47	1608.38	.07	6.23	.01	194.88	143.53	1.01	49.00	45.00	49.00
*	3.151	720.00	13.47	1609.06	.18	8.97	.01	85.78	107.70	1.60	.00	45.00	.00
*	3.281	680.00	10.74	1615.94	.05	7.46	.00	74.58	144.78	1.19	.00	45.00	49.00
	3.281	680.00	10.74	1616.71	.29	7.62	.04	152.45	108.50	1.62	.00	45.00	49.00
*	3.408	680.00	12.45	1624.52	.17	9.69	.04	265.22	145.78	1.55	.00	45.00	49.00
	3.408	680.00	12.65	1625.86	.13	9.13	.02	119.26	109.15	2.53	.00	45.00	49.00
*	3.547	750.00	13.20	1634.00	.03	9.07	.01	61.56	146.74	.87	49.00	45.00	49.00
	3.547	750.00	13.20	1634.96	.09	9.09	.00	126.28	109.98	1.77	49.00	45.00	49.00
*	3.631	450.00	14.89	1640.40	.08	6.01	.02	448.20	147.37	.52	49.00	45.00	49.00
	3.631	450.00	14.89	1640.84	.10	5.88	.01	134.29	110.42	.94	49.00	45.00	.00
*	3.761	680.00	11.91	1649.27	.06	9.86	.00	61.09	148.13	1.30	.00	45.00	49.00
	3.761	680.00	11.91	1650.21	.17	9.34	.02	146.67	111.01	2.14	.00	45.00	49.00
*	3.887	690.00	12.17	1658.02	.28	6.58	.06	193.40	148.71	1.44	49.00	45.00	.00
	3.887	690.00	12.17	1658.05	.15	7.84	.00	94.30	111.59	1.61	49.00	45.00	.00
*	4.055	940.00	10.21	1667.54	.14	9.81	.01	65.17	149.41	1.81	49.00	45.00	49.00
	4.055	940.00	10.21	1667.76	.20	9.67	.02	113.17	112.32	1.66	49.00	45.00	.00

*	4.066	60.00	35.33	1669.54	.54	.54	.26	129.66	149.45	1.10	.00	30.00	.00
*	4.066	60.00	35.33	1669.54	.54	.73	.17	129.66	112.35	1.10	.00	30.00	.00
*	4.094	146.00	8.01	1671.62	.11	2.08	.09	1.37	149.54	2.45	.00	12.00	.00
*	4.094	146.00	8.01	1671.62	.11	2.08	.00	1.37	112.45	2.45	.00	12.00	.00

	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
*	4.101	40.00	23.25	1671.65	.07	.01	.01	11.53	149.59	1.58	30.00	30.00	30.00
*	4.101	40.00	23.25	1671.65	.07	.01	.01	11.53	112.49	1.58	30.00	30.00	30.00
*	-2.379	720.00	.00	1566.52	.15	5.30	-5.30	239.54	151.11	2.58	49.00	45.00	49.00
	-2.379	720.00	.00	1567.31	.11	.00	.00	66.23	114.06	3.40	49.00	45.00	49.00
	12.510	700.00	11.00	1573.16	.03	6.62	.01	26.33	152.84	1.63	49.00	45.00	49.00
*	12.510	700.00	11.00	1573.38	.33	6.01	.07	261.87	115.35	1.54	.00	45.00	49.00
*	12.639	700.00	9.43	1575.92	.12	4.63	.03	459.66	153.93	.70	49.00	45.00	.00
*	12.639	700.00	9.43	1579.69	.05	6.29	.03	45.93	116.15	1.54	49.00	45.00	.00
*	12.761	720.00	7.64	1585.72	.03	6.80	.01	46.27	155.06	2.10	49.00	45.00	49.00
*	12.761	720.00	7.64	1586.21	.46	6.40	.12	330.91	116.86	2.15	49.00	45.00	.00
*	12.904	770.00	10.52	1593.45	.11	6.93	.03	247.75	156.46	1.64	49.00	45.00	49.00
*	12.904	770.00	10.52	1594.32	.08	6.07	.04	51.34	117.61	2.54	49.00	45.00	49.00
*	13.023	625.00	11.36	1599.63	.02	5.17	.01	49.04	157.52	.82	49.00	45.00	.00
*	13.023	625.00	11.36	1600.31	.21	5.66	.04	278.58	118.28	1.30	49.00	45.00	.00
*	13.170	850.00	10.94	1609.22	.22	7.08	.06	339.67	158.55	.90	49.00	45.00	.00
*	13.170	850.00	10.94	1610.13	.11	9.82	.01	74.97	118.70	1.92	49.00	45.00	.00
*	13.277	600.00	11.67	1616.92	.05	7.68	.02	74.52	159.11	1.76	49.00	45.00	49.00
*	13.277	600.00	11.67	1617.66	.28	7.10	.05	235.79	119.35	2.28	49.00	45.00	.00
*	13.408	710.00	12.54	1626.75	.19	6.34	.04	111.28	159.91	2.56	49.00	45.00	49.00
*	13.408	710.00	12.54	1627.23	.26	9.57	.00	87.47	119.78	2.96	.00	45.00	.00
	13.536	750.00	12.53	1634.94	.07	8.17	.01	116.48	160.37	1.46	49.00	45.00	49.00
*	13.536	750.00	12.53	1635.76	.35	8.50	.03	170.88	120.15	2.01	49.00	45.00	49.00
	13.616	450.00	11.11	1640.30	.18	5.33	.03	124.74	160.95	1.72	49.00	45.00	49.00
*	13.616	450.00	11.11	1641.24	.27	5.47	.01	95.10	120.38	2.57	.00	45.00	.00
	13.743	660.00	12.27	1648.28	.14	7.97	.00	118.72	161.42	1.63	49.00	45.00	49.00
	13.743	660.00	12.27	1649.02	.36	7.75	.03	148.55	120.67	2.15	.00	45.00	.00
	13.875	725.00	11.59	1657.10	.19	8.81	.01	130.52	161.94	2.01	49.00	45.00	.00
	13.875	725.00	11.59	1657.34	.19	8.30	.02	91.00	121.06	2.24	.00	45.00	.00
	14.000	700.00	13.43	1667.83	.34	10.69	.04	183.61	162.35	1.80	49.00	45.00	49.00
*	14.000	700.00	13.43	1668.15	.61	10.69	.12	307.81	121.39	1.85	.00	45.00	.00
	14.009	45.00	22.22	1668.68	.60	.71	.13	137.66	162.37	1.38	.00	30.00	.00
*	14.009	45.00	22.22	1668.80	.39	.58	.07	70.70	121.41	1.72	.00	30.00	.00
*	14.034	134.00	7.46	1669.94	.30	1.26	.00	7.69	162.43	1.94	.00	12.00	.00
*	14.034	134.00	7.46	1669.94	.30	1.14	.00	7.75	121.47	1.94	.00	12.00	.00

	SECNO	XLCH	KACHSL	EG	HV	HL	DLOSS	10*KG	VOL	DEPTH	K*XAL	K*XNCH	K*XNR
*	14.042	40.00	32.50	1671.26	.54	.08	.12	120.35	162.45	1.73	30.00	30.00	.00
*	14.042	40.00	32.50	1671.26	.54	.08	.12	120.30	121.49	1.73	30.00	30.00	.00

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06MAY93 11:26:23

SUMMARY OF ERRORS AND SPECIAL NOTES

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CAUTION SECNO=      .503  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .503  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .503  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .503  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .503  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      .636  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .636  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .778  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .778  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .964  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .964  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.112  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.112  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.220  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.220  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.377  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.377  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.893  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.004  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.004  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     2.126  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.126  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=     2.126  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.244  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.379  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.379  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.501  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.501  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     2.630  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.630  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     2.630  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.758  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     2.758  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.758  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     2.892  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.892  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=      3.017  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      3.017  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      3.151  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.151  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=      3.151  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      3.281  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      3.408  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.408  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      3.547  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      3.631  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.631  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      3.761  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      3.887  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.887  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      4.055  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      4.066  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.066  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.066  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=      4.066  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.066  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.066  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=      4.094  PROFILE=  1  HYDRAULIC JUMP D.S.
WARNING SECNO=      4.094  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=      4.094  PROFILE=  2  HYDRAULIC JUMP D.S.
WARNING SECNO=      4.094  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      4.101  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      4.101  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     -2.379  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     12.510  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.510  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     12.639  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.639  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     12.639  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     12.761  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     12.761  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     12.904  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.904  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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WARNING SECNO=     12.904  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     13.023  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     13.023  PROFILE=  2  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     13.023  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     13.170  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     13.170  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     13.170  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     13.277  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     13.277  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     13.277  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     13.408  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     13.408  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     13.408  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     13.536  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     13.616  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     14.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     14.009  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     14.034  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     14.034  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     14.042  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     14.042  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     14.042  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     14.042  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     14.042  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     14.042  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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FLOODWAY DATA, WASH NO. 1 100-YEAR FBO
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.090	100.	462.	5.9	1505.1	1504.1	1.0
.216	97.	459.	6.0	1507.9	1507.0	.9
.359	121.	568.	3.8	1510.2	1509.5	.7
.503	100.	281.	7.7	1513.3	1513.1	.2
.636	145.	556.	3.7	1518.2	1517.5	.7
.779	65.	259.	8.3	1520.5	1520.0	.5
.964	138.	596.	3.6	1525.3	1524.4	.9
1.112	141.	344.	6.3	1528.0	1527.4	.6
1.220	147.	544.	4.0	1531.9	1530.9	1.0
1.377	89.	276.	3.3	1534.4	1533.6	.8
1.490	111.	312.	2.9	1536.1	1535.3	.8
1.636	168.	337.	2.7	1538.4	1537.9	.5
1.778	99.	250.	3.7	1541.2	1540.8	.4
1.893	217.	333.	2.7	1544.1	1543.5	.6
2.004	124.	90.	3.9	1547.9	1547.8	.1
2.128	74.	108.	3.2	1554.9	1553.9	1.0
2.264	111.	100.	3.5	1560.7	1560.2	.5
2.379	150.	135.	2.9	1567.2	1566.4	.8
2.501	71.	50.	3.6	1573.0	1572.7	.3
2.650	39.	42.	2.7	1577.6	1576.7	.7

2.758	155.	57.	3.1	1587.0	1586.3	.7
2.892	65.	71.	2.5	1594.0	1593.1	.9
3.017	53.	38.	3.7	1599.8	1599.7	.1
3.151	41.	44.	3.2	1608.9	1608.3	.6
3.281	87.	33.	4.3	1616.4	1615.8	.6
3.408	111.	51.	2.9	1625.7	1624.7	1.0
3.547	128.	46.	2.2	1634.9	1634.0	.9
3.631	76.	41.	3.5	1640.7	1640.3	.4
3.761	96.	35.	2.9	1650.0	1649.2	.8
3.897	67.	38.	2.7	1657.9	1657.7	.2
4.055	33.	30.	3.4	1667.6	1667.7	-.1
4.066	16.	17.	5.9	1669.0	1669.0	.0
4.094	16.	39.	2.6	1671.5	1671.5	.0
4.101	46.	32.	1.9	1671.6	1671.6	.0
-2.379	150.	138.	2.5	1567.2	1566.4	.8
12.810	39.	30.	4.4	1573.0	1573.1	-.1
12.638	116.	71.	1.9	1578.6	1578.8	.2
12.761	26.	24.	5.4	1585.8	1585.7	.1
12.904	68.	62.	2.1	1594.2	1593.3	.9
13.023	67.	32.	3.3	1600.1	1599.6	.5
13.170	50.	42.	2.5	1610.0	1609.0	1.0
13.277	49.	27.	3.9	1617.4	1616.9	.5

FLOODWAY DATA, WASH NO. 1 100-YEAR PRO
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY.	DIFFERENCE
13.408	15.	26.	4.1	1627.0	1626.6	.4
13.536	18.	17.	4.6	1635.4	1634.9	.5
13.616	12.	23.	4.2	1640.9	1640.1	.8
13.743	12.	19.	4.8	1648.6	1648.1	.5
13.875	21.	27.	3.5	1657.1	1656.9	.2
14.000	12.	15.	6.2	1667.5	1667.5	.0
14.009	11.	19.	5.0	1668.4	1668.1	.3
14.034	11.	21.	4.4	1669.6	1669.6	.0
14.042	16.	16.	5.7	1670.7	1670.7	.0

```
1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.0;  February 1991       *
 *                                        *
 *  RUN DATE    06MAY93    TIME   11:30:45 *
 *****************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS         *
*  HYDROLOGIC ENGINEERING CENTER        *
*  609 SECOND STREET, SUITE D           *
*  DAVIS, CALIFORNIA 95616-4687         *
*          (916) 756-1104               *
*****************************************
```

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

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06MAY93 11:30:45 PAGE 1

THIS RUN EXECUTED 06MAY93 11:30:45

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

 Version   4.6.0;  February 1991
*****************************************
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```
T1      SUN VALLEY PARKWAY NORTH FIG.   CONTRACT:FCDMC NO.90-04, FILE:WASH2-4
T2      100-YEAR WATER SURFACE PROFILE                A-N WEST INC.   PHX. AZ.
T3      WASH NO. 2   100- YEAR PROFILE                DATE:5\3\91;REV.8\14\91

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2                         .006                                1536.5

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLOC    IBW      CHNIM    ITRACE

     1                  -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       43        1        2       26       39       21       22       27       28
    53       54        0       38       12       14       15       55       26       56
    63        1       51        4       42       57        3       38       39       33
     3       10       11       12        5        7        8       16       17       15
     0      200

NC    .049     .049     .045      .1       .3
NT      2     1293     1293
ET            7.1      9.1                                9469.7   10030.4   9918.3   9995.61
      FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
      MODEL RESULTS USING EQUAL CONVEYANCE REDUCTION (METHOD 4).
      STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
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      CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
      CONFLUENCE WITH WASH NO. 1 ALONE BASELINE.
      CROSS-SECTIONS ARE COSED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
      STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
      ET APPLIED TO PREVENT INEFFECTIVE FLOW TO RIGHT OF RIDGE ON RIGHT.
X1    .1070        95     9918.3     9954.9         0         0         0
GR  1536.9    9469.7    1535.9    9495.7    1535.6    9513.9    1535.9    9527.9    1535.5    9537.8
GR  1536.1    9549.1    1535.3    9554.4    1536.2    9561.3    1536.1    9569.8    1536.1    9583.8
GR  1536.3    9593.0    1536.1    9604.1    1536.2    9613.3    1535.8    9631.4    1534.4    9637.5
GR  1535.9    9645.7    1535.7    9655.9    1536.4    9662.6    1536.4    9670.1    1535.9    9682.2
GR  1536.1    9698.0    1535.9    9727.1    1536.3    9745.2    1535.8    9757.9    1536.1    9774.4
GR  1535.6    9793.8    1536.2    9812.7    1535.9    9828.8    1535.9    9851.9    1535.9    9867.9
1
   06MAY93      11:30:45                                                                          PAGE    2


GR  1535.8    9882.8    1535.1    9901.4    1534.9    9918.0    1534.0    9930.0    1533.3    9938.1
GR  1533.4    9943.3    1532.6    9946.0    1532.7    9949.1    1534.7    9954.9    1535.4    9960.0
GR  1534.6    9966.0    1535.1    9974.2    1535.5    9979.9    1534.2    9994.2    1534.6   10000.0
GR  1534.6   10000.1    1536.2   10002.2    1535.2   10013.3    1535.8   10022.2    1536.8   10030.4
GR  1535.9   10036.6    1536.3   10043.8    1535.9   10056.4    1535.8   10066.5    1535.6   10079.7
GR  1535.6   10094.7    1535.3   10106.4    1535.7   10120.0    1535.3   10131.9    1535.5   10141.1
GR  1535.5   10152.0    1535.5   10166.8    1535.4   10179.5    1535.3   10194.4    1534.9   10206.9
GR  1534.8   10219.1    1534.7   10231.5    1534.7   10246.1    1534.7   10259.6    1534.5   10275.2
GR  1534.5   10291.3    1534.3   10305.4    1534.3   10319.4    1534.0   10335.5    1533.8   10347.3
GR  1533.3   10364.4    1532.7   10377.2    1532.8   10395.5    1532.2   10400.7    1531.1   10404.2
GR  1531.5   10406.1    1532.3   10408.9    1532.2   10413.9    1532.9   10419.1    1533.0   10427.4
GR  1532.9   10441.8    1533.5   10492.1    1533.5   10464.2    1533.9   10476.3    1534.2   10492.4
GR  1534.8   10506.8    1534.6   10521.3    1534.6   10533.3    1535.0   10548.5    1538.3   10663.0

ET                         9.1                                                       9986     10081
X1    .2197        66    10020    10048.2       590       610       600
GR  1541.9    9592.5    1541.5    9610.6    1541.4    9634.5    1541.3    9653.5    1541.0    9668.0
GR  1541.0    9680.6    1540.8    9694.5    1541.1    9713.8    1541.2    9727.1    1541.2    9741.8
GR  1541.4    9758.9    1541.3    9777.5    1541.3    9794.2    1541.9    9805.1    1541.7    9816.2
GR  1541.8    9834.4    1541.8    9847.7    1541.5    9860.6    1541.9    9879.7    1541.8    9897.4
GR  1542.0    9916.1    1541.9    9934.1    1541.9    9951.5    1541.8    9970.1    1541.3    9986.6
GR  1540.8    9998.7    1540.4   10000.0    1540.4   10000.1    1540.3   10014.1    1539.9   10020.0
GR  1538.6   10021.8    1538.7   10027.9    1540.1   10033.9    1540.1   10037.5    1539.7   10042.5
GR  1540.4   10048.2    1540.4   10055.0    1540.5   10065.7    1540.3   10074.3    1540.2   10086.8
GR  1540.2   10096.7    1540.5   10107.0    1538.9   10116.4    1538.9   10121.4    1540.4   10125.8
GR  1540.7   10134.1    1541.0   10141.6    1541.0   10152.0    1541.1   10163.8    1541.1   10174.9
GR  1541.4   10191.9    1541.9   10204.0    1542.0   10220.7    1542.0   10233.9    1542.0   10249.0
GR  1542.1   10264.4    1542.2   10278.2    1542.3   10312.1    1542.1   10331.6    1542.4   10352.1
GR  1542.6   10362.1    1542.6   10377.1    1542.9   10392.2    1542.9   10410.1    1542.7   10425.1
GR  1542.9   10427.5

ET                       7.1       9.1                          9708.4   10507.2   10055.2   10158.1
      ET APPLIED TO PREVENT INEFFECTIVE FLOW TO LEFT OF RIDGE ON LEFT.
X1    .3523        95    10055.2    10084.1       700       690       675
GR  1548.9    9556.5    1549.1    9566.4    1548.1    9573.9    1549.5    9582.4    1548.6    9588.2
GR  1549.0    9596.3    1549.0    9605.3    1549.2    9620.6    1549.0    9631.0    1549.2    9641.2
GR  1549.2    9655.1    1548.8    9671.2    1549.0    9683.3    1549.0    9695.1    1549.4    9708.4
GR  1549.4    9719.1    1549.0    9728.2    1549.0    9742.8    1548.9    9755.1    1548.6    9763.2
GR  1548.8    9772.4    1548.6    9784.0    1548.8    9796.5    1548.6    9812.4    1548.6    9825.1
GR  1548.8    9837.8    1548.7    9850.9    1548.6    9865.3    1546.4    9874.1    1548.5    9877.0
GR  1548.3    9884.3    1548.3    9889.2    1548.9    9895.6    1548.9    9905.2    1548.9    9917.0
GR  1548.5    9926.9    1548.4    9935.1    1548.1    9945.4    1548.1    9956.2    1548.2    9967.9
GR  1548.4    9976.7    1548.3    9989.2    1548.3   10000.0    1548.3   10000.1    1548.3   10009.8
GR  1548.2   10023.9    1548.1   10038.1    1548.2   10053.2    1545.1   10068.7    1545.6   10072.2
GR  1547.5   10076.2    1548.3   10084.1    1548.2   10091.5    1548.0   10099.7    1547.7   10104.3
GR  1547.3   10112.0    1547.2   10120.1    1547.2   10129.7    1547.7   10135.9    1546.1   10144.7
GR  1545.0   10150.3    1546.6   10162.4    1548.5   10178.6    1547.2   10185.4    1547.3   10193.5
GR  1547.4   10202.4    1547.5   10211.2    1547.3   10222.7    1547.7   10232.5    1548.1   10241.1
GR  1548.1   10252.1    1548.2   10263.6    1547.8   10273.4    1548.2   10280.7    1548.2   10290.6
GR  1547.4   10294.9    1548.0   10302.4    1548.7   10309.1    1548.2   10320.3    1548.3   10327.6
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GR	1545.0	10355.0	1548.0	10349.8	1546.0	10362.3	1547.9	10373.1	1547.9	10379.3
GR	1547.9	10386.2	1548.1	10395.1	1547.8	10402.3	1548.0	10409.7	1547.9	10423.2
GR	1547.8	10445.4	1548.2	10457.4	1548.2	10468.7	1548.3	10482.0	1549.6	10507.2

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ET			9.1						9990	10200
X1	.4811	95	10015.9	10033.2	690	700	740			
GR	1555.7	9562.8	1554.9	9575.6	1554.9	9589.4	1555.1	9601.7	1555.4	9612.3
GR	1554.9	9693.3	1555.1	9711.9	1555.0	9730.3	1555.0	9747.3	1555.2	9763.3
GR	1554.8	9857.5	1554.4	9871.2	1554.6	9887.5	1554.5	9902.6	1555.0	9922.2
GR	1554.5	9930.5	1553.8	9936.7	1554.9	9943.5	1554.7	9949.7	1554.9	9953.4
GR	1553.8	9961.2	1554.8	9965.8	1554.9	9976.8	1554.9	9979.2	1554.4	9983.2
GR	1555.1	9990.9	1554.7	9997.2	1554.3	10000.0	1554.3	10000.1	1554.9	10008.9
GR	1555.1	10015.9	1553.5	10019.6	1552.1	10021.7	1553.0	10026.2	1556.0	10033.2
GR	1554.8	10042.4	1554.5	10049.2	1554.8	10057.9	1554.4	10064.9	1555.1	10069.8
GR	1555.3	10076.3	1555.1	10080.3	1554.4	10083.6	1554.4	10091.4	1555.3	10094.3
GR	1554.6	10103.0	1554.9	10114.7	1554.9	10128.9	1555.1	10141.5	1554.7	10152.2
GR	1554.9	10163.6	1554.6	10174.2	1554.8	10189.4	1554.6	10205.3	1554.8	10224.3
GR	1554.5	10237.3	1554.6	10254.7	1554.5	10269.9	1554.7	10285.9	1554.9	10299.8
GR	1554.6	10316.2	1554.9	10331.3	1554.5	10339.7	1554.0	10349.9	1553.7	10355.6
GR	1555.1	10373.6	1555.0	10381.0	1554.0	10389.7	1554.2	10398.8	1554.5	10408.5
GR	1554.5	10421.1	1554.7	10436.0	1554.7	10452.4	1554.6	10466.5	1554.5	10483.7
GR	1554.5	10496.1	1554.7	10514.5	1554.2	10519.2	1554.7	10531.0	1553.3	10544.2
GR	1552.7	10547.1	1554.6	10553.8	1554.6	10563.9	1554.1	10571.9	1553.2	10582.7
GR	1554.2	10590.6	1554.2	10598.0	1554.7	10613.0	1554.9	10627.5	1554.5	10646.4
GR	1554.7	10664.1	1555.8	10681.5	1556.6	10701.7	1556.3	10719.5	1555.9	10732.2

ET			9.1						10000	10250
X1	.6108	95	10033.0	10066.8	700	675	700			
GR	1562.2	9515.9	1562.7	9535.0	1562.3	9555.6	1562.2	9572.6	1562.2	9584.5
GR	1562.7	9593.2	1562.6	9607.3	1562.2	9617.2	1562.5	9633.0	1562.9	9642.7
GR	1562.6	9652.6	1562.6	9666.2	1562.1	9682.1	1561.8	9692.2	1561.4	9760.6
GR	1560.7	9774.9	1561.2	9784.3	1561.0	9796.6	1561.5	9806.0	1561.7	9817.3
GR	1561.0	9974.6	1560.6	9984.3	1560.6	9991.4	1560.6	9996.8	1561.0	10002.1
GR	1561.0	10008.4	1560.7	10009.9	1560.7	10010.0	1560.7	10010.1	1560.7	10010.2
GR	1560.6	10015.3	1561.1	10025.0	1561.0	10033.0	1560.8	10038.3	1559.2	10043.7
GR	1560.5	10046.6	1559.9	10050.4	1561.3	10059.4	1561.0	10066.8	1560.2	10070.4
GR	1559.9	10074.2	1560.9	10078.3	1561.1	10084.6	1560.4	10087.6	1560.7	10092.1
GR	1561.1	10095.8	1560.5	10099.4	1560.3	10104.5	1560.3	10109.5	1561.4	10115.1
GR	1561.1	10122.9	1560.6	10128.1	1560.7	10139.8	1560.8	10149.8	1560.6	10160.3
GR	1559.8	10166.3	1560.8	10171.9	1560.9	10180.5	1561.4	10187.3	1561.7	10194.1
GR	1561.1	10275.7	1560.8	10334.1	1560.7	10351.7	1560.5	10365.6	1560.3	10382.3
GR	1560.2	10394.0	1560.4	10405.5	1560.1	10412.3	1560.0	10421.8	1560.3	10428.2
GR	1560.7	10439.2	1560.7	10445.2	1560.2	10447.0	1560.2	10453.7	1560.5	10458.8
GR	1560.1	10463.5	1560.5	10547.2	1560.9	10566.2	1561.2	10584.0	1561.2	10598.3
GR	1561.6	10616.8	1561.9	10631.7	1560.9	10646.4	1561.4	10667.3	1560.8	10678.4
GR	1561.7	10684.5	1561.3	10692.7	1560.8	10698.1	1560.6	10704.9	1561.4	10711.8
GR	1561.2	10759.2	1561.1	10769.1	1561.7	10778.1	1562.5	10788.1	1562.6	10800.1

ET			9.1						10007.5	10237.1
X1	.7377	85	10007.3	10022.8	675	670	675			
GR	1571.4	9530	1570	9570	1569.4	9740	1568	9860	1566	9920
GR	1565.8	9935	1565.9	9955	1566.5	10000.0	1566.1	10007.5	1565.2	10013.9
GR	1565.4	10017.7	1566.3	10022.8	1566.8	10028.5	1566.5	10038.5	1566.3	10047.5
GR	1566.9	10053.7	1566.6	10064.8	1566.8	10078.4	1566.9	10091.2	1566.6	10103.1
GR	1567.2	10115.9	1566.8	10125.6	1566.6	10133.2	1567.2	10142.1	1566.8	10150.6
GR	1566.6	10160.5	1566.6	10170.8	1566.7	10181.9	1566.8	10194.6	1567.0	10207.0
GR	1567.3	10218.8	1567.4	10231.9	1567.2	10244.7	1567.2	10258.5	1567.0	10271.0

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GR	1567.8	10285.2	1567.1	10298.3	1566.9	10315.2	1567.4	10326.7	1567.3	10342.3

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GR   1567.2    10356.3    1566.9    10374.8    1567.1    10390.8    1566.9    10403.4    1567.3    10416.1
GR   1567.0    10427.5    1567.1    10442.2    1567.2    10456.3    1567.0    10473.6    1566.6    10482.1
GR   1567.2    10489.0    1567.2    10498.6    1566.8    10509.9    1566.8    10515.6    1566.9    10520.0
GR   1567.2    10526.5    1566.6    10529.2    1566.4    10532.2    1567.0    10538.4    1567.2    10540.7
GR   1567.1    10601.5    1566.9    10612.5    1566.9    10624.2    1566.9    10637.1    1566.8    10647.5
GR   1566.4    10661.5    1566.3    10669.4    1566.3    10678.8    1566.2    10686.2    1566.5    10703.7
GR   1566.5    10712.9    1566.5    10720.4    1566.7    10729.8    1566.7    10742.0    1567.0    10752.4
GR   1567.5    10764.0    1567.6    10776.5    1567.7    10790.4    1568.1    10808.0    1568.4    10818.7
GR   1566.6    10831.1    1568.1    10845.0    1568.5    10861.8    1568.4    10867.6    1571.0    10869.7

ET                7.1        9.1                                    9450.0    10270.7    9884.6    10217.2
        ET APPLIED AT SEC.,8731 AND 1.0133 TO PREVENT INEFFECTIVE FLOW TO
        RIGHT OF RIDGE ON RT.
X1    .8731        95    10027.8    10037.3       720       720       730
GR   1574.4    9450.0    1575.1    9467.1    1574.7    9485.1    1573.7    9571.7    1573.6    9585.1
GR   1573.0    9594.2    1572.2    9603.0    1572.9    9607.4    1572.6    9614.1    1572.4    9616.6
GR   1573.1    9623.2    1572.8    9631.7    1572.0    9639.3    1572.6    9645.8    1572.8    9652.3
GR   1572.5    9659.0    1572.0    9660.9    1572.8    9666.2    1573.0    9673.9    1573.2    9681.9
GR   1573.3    9688.7    1572.5    9697.2    1572.5    9702.0    1573.3    9708.4    1573.5    9716.8
GR   1572.7    9760.1    1574.0    9767.7    1574.0    9775.8    1573.8    9785.1    1573.6    9795.8
GR   1573.7    9861.5    1573.8    9872.6    1573.5    9882.4    1573.1    9891.7    1572.9    9904.3
GR   1572.7    9908.3    1572.3    9911.7    1573.6    9916.5    1573.5    9926.9    1573.9    9934.1
GR   1573.4    9942.9    1573.4    9952.2    1573.2    9958.0    1573.3    9964.6    1572.9    9969.3
GR   1574.2    10020.4   1574.2    10027.8   1572.9    10029.5   1572.6    10033.2   1574.1    10037.3
GR   1574.1    10041.5   1574.1    10041.6   1573.7    10046.6   1573.3    10050.0   1574.1    10055.9
GR   1574.9    10062.5   1574.9    10070.3   1574.3    10081.6   1574.3    10090.3   1575.0    10098.0
GR   1574.1    10139.1   1574.4    10143.8   1574.1    10150.4   1573.7    10155.0   1574.0    10163.2
GR   1573.9    10205.5   1573.6    10209.7   1572.8    10213.9   1572.8    10216.8   1574.3    10223.2
GR   1574.0    10233.1   1573.7    10242.3   1573.4    10252.1   1574.2    10260.3   1574.5    10270.7
GR   1574.1    10333.0   1574.2    10344.6   1573.9    10355.4   1573.8    10366.1   1573.6    10376.5
GR   1573.6    10426.1   1573.6    10434.1   1573.4    10440.5   1573.6    10448.6   1573.7    10458.0
GR   1572.2    10499.7   1573.3    10504.0   1573.1    10509.9   1572.4    10513.9   1572.8    10518.9
GR   1573.0    10525.8   1573.4    10533.0   1572.9    10538.1   1572.6    10543.8   1574.2    10590.0

BT       2       1273       1273
ET                7.1        9.1                                    9238.0    10173.9    9796.7    10032.7
X1   1.0133        95    9979.7    10032.7       690       725       735
GR   1581.9    9238.0    1581.6    9240.9    1581.1    9247.8    1581.2    9260.9    1581.2    9270.3
GR   1581.3    9332.7    1580.7    9341.3    1580.9    9350.3    1580.7    9358.4    1581.0    9375.9
GR   1581.1    9469.7    1581.1    9486.6    1581.1    9504.5    1581.1    9522.0    1581.1    9536.6
GR   1581.1    9551.6    1581.0    9569.4    1580.7    9583.1    1580.6    9595.4    1580.5    9676.7
GR   1579.8    9684.4    1580.4    9694.0    1578.6    9703.5    1578.5    9706.4    1580.8    9714.9
GR   1580.5    9724.9    1580.2    9733.8    1580.8    9746.5    1578.8    9757.0    1580.3    9765.6
GR   1580.2    9774.0    1579.6    9781.6    1579.9    9790.8    1579.0    9794.9    1579.7    9799.5
GR   1580.5    9812.3    1580.4    9822.5    1580.8    9835.6    1580.8    9849.8    1580.8    9869.4
GR   1580.9    9887.5    1581.0    9902.8    1581.0    9917.7    1580.9    9931.3    1580.1    9936.1
GR   1580.1    9939.8    1581.1    9947.4    1581.2    9956.4    1581.2    9967.5    1581.1    9975.0
GR   1580.0    9979.7    1579.7    9983.7    1579.8    9987.1    1580.9    9991.9    1581.0    10000.0
GR   1581.4    10011.6   1581.2    10023.3   1579.4    10027.2   1579.9    10029.7   1581.2    10032.7
GR   1581.4    10041.2   1581.4    10050.8   1580.2    10057.4   1580.8    10060.5   1580.9    10065.0
GR   1581.2    10068.7   1581.2    10068.5   1581.2    10068.9   1581.2    10069.0   1579.9    10078.8
GR   1581.9    10083.6   1581.6    10093.8   1581.6    10103.8   1582.1    10114.7   1581.4    10122.0
GR   1582.0    10129.6   1581.6    10138.7   1582.1    10147.8   1581.9    10166.6   1582.1    10173.9
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GR   1581.4    10235.1   1581.3    10254.1   1581.2    10261.5   1581.4    10271.1   1581.5    10280.5
GR   1581.6    10295.3   1581.7    10304.1   1581.9    10314.9   1581.7    10335.0   1581.7    10342.9
GR   1581.7    10353.5   1581.9    10363.0   1581.9    10373.8   1581.9    10384.2   1582.0    10394.3

ET                          9.1                                                   9700.0    9976.7
X1   1.1518        95    9941.6    9976.7       690       700       750
GR   1590.2    9274.0    1590.6    9301.3    1590.3    9309.3    1590.3    9319.4    1590.1    9331.0
GR   1589.1    9341.1    1588.8    9350.7    1588.4    9359.7    1588.1    9370.1    1588.0    9380.0
GR   1588.3    9395.7    1587.8    9397.4    1587.2    9399.9    1587.1    9403.6    1588.2    9409.7
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GR   1587.2    9416.4    1587.7    9424.5    1587.8    9430.6    1587.5    9440.0    1587.4    9448.7
GR   1587.9    9460.4    1587.6    9468.9    1587.4    9475.8    1587.7    9486.9    1587.5    9506.4
GR   1587.9    9563.3    1588.3    9569.2    1588.1    9575.2    1587.9    9579.7    1588.2    9589.1
GR   1588.8    9600.4    1588.8    9613.5    1588.2    9645.4    1589.0    9662.5    1588.3    9680.1
GR   1588.9    9689.9    1587.8    9701.0    1587.9    9708.6    1588.8    9714.3    1588.7    9720.8
GR   1587.7    9723.5    1587.7    9727.4    1588.6    9733.4    1588.9    9741.3    1588.5    9746.3
GR   1588.7    9752.7    1588.4    9757.8    1587.6    9760.9    1588.3    9765.6    1587.6    9774.5
GR   1587.2    9778.6    1588.1    9785.7    1588.2    9793.4    1587.9    9801.3    1588.5    9810.6
GR   1588.5    9819.1    1588.6    9830.8    1589.0    9851.4    1589.4    9869.5    1589.2    9841.6
GR   1587.7    9849.0    1588.0    9852.4    1588.1    9861.0    1588.8    9868.3    1587.8    9870.3
GR   1588.7    9874.7    1589.7    9879.7    1589.9    9879.8    1589.4    9888.0    1589.4    9893.3
GR   1589.8    9898.7    1589.5    10000.0   1589.5    10030.1   1589.7    10064.2   1590.5    10089.1
GR   1590.8    10018.9   1590.5    10027.8   1589.7    10035.3   1589.5    10043.5   1587.9    10049.7
GR   1589.7    10052.8   1589.7    10067.3   1589.7    10076.4   1589.1    10089.6   1589.6    10097.5
GR   1590.1    10109.1   1590.1    10116.6   1589.9    10129.1   1590.1    10140.8   1590.2    10150.0
GR   1591.2    10213.9   1590.6    10224.2   1591.0    10241.7   1590.7    10252.1   1590.2    10260.4

ET                        9.1                                                         9700      10052.3
X1   1.2879       71    10000.1   10052.3      705       705       750
GR   1598.1    9306.9    1598.2    9322.3    1597.4    9348.8    1596.9    9369.4    1597.3    9385.7
GR   1596.0    9401.5    1596.3    9411.6    1595.6    9419.9    1594.9    9424.0    1596.3    9430.3
GR   1596.2    9437.5    1595.7    9440.8    1596.8    9449.0    1596.1    9457.2    1596.6    9465.1
GR   1596.2    9473.2    1596.1    9480.8    1596.7    9488.5    1596.1    9497.7    1595.9    9513.5
GR   1596.0    9532.0    1595.9    9548.1    1595.7    9561.5    1594.5    9572.0    1596.0    9579.3
GR   1595.9    9593.3    1596.2    9608.3    1596.4    9617.6    1595.5    9631.4    1594.5    9634.4
GR   1595.9    9639.0    1596.3    9648.1    1596.6    9659.9    1596.8    9673.4    1596.5    9670.1
GR   1596.8    9701.7    1594.8    9705.2    1596.4    9713.5    1597.0    9724.9    1596.2    9738.9
GR   1596.7    9753.4    1596.8    9766.5    1596.6    9782.2    1597.4    9797.2    1597.2    9815.6
GR   1596.6    9831.9    1596.5    9845.1    1596.6    9858.4    1596.7    9875.0    1596.8    9893.0
GR   1596.9    9912.0    1597.1    9927.9    1596.6    9936.9    1597.4    9946.6    1596.8    9953.9
GR   1597.6    9963.6    1597.3    9973.4    1597.5    9989.3    1595.4    9997.7    1596.1    10000.0
GR   1597.1    10000.1   1595.5    10016.5   1595.5    10034.9   1597.0    10052.3   1597.2    10069.5
GR   1597.9    10084.7   1597.8    10105.8   1597.9    10125.7   1597.7    10144.4   1598.4    10155.4
GR   1598.5    10165.2

QT        2       1250      1250
ET                        9.1                                                         9697.5    9938.8
X1   1.4852       72    9894.7    9938.8      700       715       760
GR   1604.9    9303.6    1605.1    9313.1    1605.1    9329.1    1604.8    9347.0    1605.0    9361.5
GR   1604.8    9377.7    1604.8    9395.5    1604.1    9412.9    1603.6    9419.5    1603.7    9431.6
GR   1603.7    9437.8    1603.6    9442.7    1603.6    9447.2    1604.1    9452.2    1603.6    9459.3
GR   1604.1    9467.6    1603.9    9484.3    1603.9    9494.3    1603.6    9497.6    1604.0    9504.1
GR   1604.0    9516.6    1604.1    9535.3    1603.7    9548.5    1603.9    9564.5    1604.1    9581.7
GR   1604.6    9596.9    1604.6    9617.3    1604.1    9647.6    1604.0    9658.4    1603.9    9674.0
GR   1603.9    9689.1    1603.6    9699.2    1603.7    9705.6    1603.6    9717.6    1604.0    9728.4
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GR   1604.2    9737.4    1604.5    9749.9    1604.1    9761.6    1603.9    9773.3    1604.2    9784.8
GR   1604.4    9810.8    1604.4    9828.2    1604.7    9847.1    1604.5    9860.4    1603.6    9870.8
GR   1604.3    9880.8    1604.3    9894.7    1604.1    9901.6    1603.8    9908.2    1604.0    9917.3
GR   1604.2    9927.4    1604.5    9938.8    1604.1    9951.6    1604.5    9962.3    1604.1    9972.9
GR   1603.9    9984.5    1603.9    9998.5    1603.7    10000.0   1603.7    10000.1   1603.5    10007.9
GR   1604.1    10013.2   1604.2    10027.7   1604.2    10044.5   1604.0    10058.6   1604.0    10078.7
GR   1603.7    10093.8   1603.6    10105.7   1603.6    10118.7   1603.7    10131.2   1604.3    10141.7
GR   1605.3    10152.5   1605.3    10152.6

ET                        9.1                                                         9649.2    10018.8
X1   1.555        73    9949.2    9976.6      640       685       705
GR   1613.5    9300.5    1612.6    9344.6    1612.1    9360.9    1613.0    9423.0    1611.2    9437.2
GR   1610.0    9449.1    1611.2    9461.7    1611.8    9473.7    1611.5    9485.4    1611.7    9500.4
GR   1611.2    9513.9    1611.6    9522.3    1611.2    9532.2    1609.8    9537.1    1611.1    9540.3
GR   1611.4    9551.9    1611.3    9567.4    1609.8    9579.3    1611.9    9587.9    1612.3    9599.1
GR   1612.1    9614.5    1612.3    9628.9    1611.5    9639.4    1610.7    9645.1    1611.6    9653.7
GR   1612.0    9660.8    1611.7    9678.5    1611.4    9688.6    1611.5    9696.3    1612.1    9706.0
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GR   1612.1    9721.8    1612.0    9735.1    1612.2    9746.4    1612.2    9756.8    1612.4    9773.2
GR   1612.9    9786.7    1612.8    9798.9    1612.7    9812.3    1612.9    9831.3    1612.4    9847.3
GR   1612.1    9860.6    1613.3    9877.6    1612.0    9893.1    1611.6    9909.4    1610.9    9915.7
GR   1611.9    9920.8    1611.6    9929.7    1611.7    9937.9    1611.7    9949.2    1610.2    9959.4
GR   1610.4    9967.2    1611.0    9971.7    1611.8    9976.6    1611.6    9986.6    1611.9    9994.2
GR   1611.6    9998.1    1611.0    10000.0   1611.0    10000.1   1611.2    10015.6   1611.2    10030.0
GR   1611.2    10040.8   1611.2    10048.1   1610.2    10056.5   1610.3    10061.5   1611.9    10069.2
GR   1610.9    10080.2   1611.4    10086.6   1611.0    10099.0   1611.1    10108.3   1611.5    10114.0
GR   1611.4    10123.2   1611.4    10128.1   1611.8    10137.8   1610.8    10145.4   1611.5    10152.1
GR   1611.4    10214.1   1611.6    10222.4   1611.6    10230.4   1610.6    10238.6   1611.4    10243.3
GR   1611.7    10251.7   1612.4    10259.8   1612.5    10270.7   1612.9    10281.5   1612.7    10290.3
GR   1613.1    10300.5   1613.1    10313.6   1613.4    10325.4   1613.0    10339.1   1613.0    10354.8
GR   1612.8    10362.9   1613.2    10372.7   1613.2    10382.4   1613.4    10395.7   1613.0    10409.7

ET        2       419       419
ET                          9.1                                                         9943     10050
XI   1.7187        70    9862.3    9881.2       750       875       850
GR   1621.9    9657.8    1621.6    9666.3    1621.4    9679.8    1621.8    9691.2    1621.6    9698.2
GR   1621.6    9704.0    1621.6    9713.0    1621.5    9724.6    1621.3    9734.8    1621.3    9749.3
GR   1620.9    9760.9    1620.9    9773.3    1620.4    9784.1    1620.4    9798.7    1620.4    9812.5
GR   1620.4    9824.0    1620.9    9835.8    1620.9    9845.6    1621.2    9857.0    1621.2    9868.0
GR   1621.0    9881.3    1620.5    9888.6    1620.9    9893.2    1621.4    9900.1    1621.2    9914.7
GR   1620.9    9921.5    1620.4    9928.2    1620.5    9934.9    1620.7    9940.8    1620.9    9947.4
GR   1620.5    9953.8    1621.1    9957.0    1621.0    9962.3    1620.2    9969.0    1619.4    9974.4
GR   1620.7    9981.2    1620.7    9991.3    1620.8    9999.2    1621.2    10000.0   1621.2    10000.1
GR   1621.1    10012.3   1620.9    10024.7   1620.9    10035.7   1620.5    10041.8   1619.8    10047.0
GR   1619.5    10053.3   1620.0    10059.8   1619.8    10066.3   1621.3    10070.5   1621.0    10075.7
GR   1620.2    10095.5   1620.5    10106.2   1620.6    10115.0   1620.8    10126.9   1620.1    10140.6
GR   1620.2    10149.5   1619.7    10154.2   1621.2    10161.5   1621.4    10169.8   1621.5    10181.0
GR   1621.3    10193.4   1621.6    10207.5   1621.4    10221.4   1621.6    10235.3   1621.7    10250.9
GR   1621.8    10262.0   1621.1    10270.3   1621.7    10277.8   1621.7    10283.0   1622.4    10289.3
1
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ET                  7.1       9.1                                         9649.5    10141.5    9914.2     9945.4
        ET APPLIED AT SEC. 1.8314, 1.9935 AND 2.1231 TO PREVENT INEFFECTIVE FLOW
        TO RIGHT OF RIDGE ON RIGHT.
XI   1.8314        61    9914.2    9945.7       550       605       590
GR   1629.9    9649.5    1629.9    9664.0    1629.9    9679.4    1629.8    9692.5    1629.3    9706.2
GR   1629.2    9720.9    1629.2    9733.4    1628.5    9745.0    1628.1    9754.2    1628.6    9766.9
GR   1629.1    9774.3    1628.6    9786.9    1628.9    9797.5    1628.9    9806.6    1628.9    9819.9
GR   1629.2    9828.3    1627.8    9836.4    1629.7    9844.3    1628.3    9854.1    1627.6    9862.6
GR   1627.5    9868.5    1627.8    9878.5    1627.2    9886.3    1627.3    9896.2    1627.6    9908.1
GR   1626.9    9914.2    1628.0    9931.3    1625.0    9938.3    1627.7    9945.7    1627.6    9959.4
GR   1627.9    9969.2    1627.9    9976.4    1627.5    9985.6    1627.9    9998.3    1626.9    10000.0
GR   1626.9    10000.1   1627.3    10013.2   1627.3    10027.4   1627.2    10043.6   1627.2    10057.5
GR   1627.4    10069.5   1627.4    10079.2   1627.2    10088.4   1627.5    10096.4   1627.1    10105.9
GR   1627.9    10112.6   1628.7    10119.4   1628.9    10126.5   1628.8    10133.4   1629.9    10141.5
GR   1628.7    10151.4   1627.9    10160.0   1627.5    10168.8   1626.7    10177.2   1627.5    10183.2
GR   1627.2    10191.1   1627.8    10198.8   1627.4    10205.9   1627.9    10212.6   1627.1    10220.6
GR   1630.0    10227.5

ET                  7.1       9.1                                         9619.0    10188.9      10093     10120
XI   1.9935        75   10094.8   10119.8       750       750       750
GR   1640.0    9583.6    1640.2    9605.0    1640.3    9619.0    1639.8    9634.3    1639.7    9648.4
GR   1639.5    9660.4    1639.4    9673.1    1639.5    9684.1    1639.4    9701.9    1639.3    9713.1
GR   1639.3    9721.8    1639.5    9747.8    1639.7    9758.5    1639.7    9771.8    1639.5    9781.9
GR   1639.8    9792.6    1639.9    9802.6    1639.6    9809.7    1638.0    9821.9    1639.6    9827.8
GR   1639.7    9846.0    1639.5    9854.1    1638.7    9865.2    1638.7    9875.5    1638.7    9885.2
GR   1638.9    9896.8    1638.7    9907.8    1639.2    9920.8    1638.5    9926.9    1638.7    9936.7
GR   1638.9    9951.0    1638.9    9963.0    1639.0    9976.4    1638.9    9988.1    1638.4    10000.0
GR   1638.3    10000.1   1638.3    10000.2   1638.2    10023.2   1637.8    10036.7   1637.4    10048.9
GR   1636.5    10059.7   1636.7    10071.6   1636.4    10085.9   1636.4    10094.8   1635.8    10099.1
GR   1635.4    10101.8   1634.6    10107.0   1635.9    10119.8   1639.4    10126.9   1639.3    10135.5
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GR   1639.1    10149.1    1639.1    10161.4    1639.0    10176.9    1639.0    10188.9    1637.5    10205.8
GR   1637.2    10215.1    1636.7    10222.4    1636.2    10237.6    1636.0    10245.9    1635.8    10255.3
GR   1634.3    10261.6    1635.0    10266.4    1634.0    10271.7    1636.6    10278.9    1636.6    10288.9
GR   1636.2    10293.6    1637.5    10303.0    1637.9    10312.1    1638.4    10317.9    1638.3    10325.2
GR   1639.4    10332.7    1639.7    10340.4    1640.5    10345.9    1640.9    10352.7    1644.2    10363.5

DT        2        407        407
ET                 7.1        9.1                                   9799.1    10115.9    9873.4     9958.2
X1   2.1231         85     9873.4     9906.9       850        800       935
GR   1648.4     9759.1    1649.3     9817.8    1648.2     9837.1    1647.0     9857.0    1647.0     9863.7
GR   1648.0     9873.4    1645.4     9879.3    1645.2     9886.8    1647.3     9892.6    1646.3     9902.4
GR   1648.0     9908.9    1648.3     9918.1    1647.7     9929.0    1648.2     9938.4    1647.8     9948.3
GR   1647.8     9958.1    1647.6     9965.9    1647.9     9975.0    1647.4     9984.1    1647.2     9997.7
GR   1646.8    10000.0    1646.8    10000.1    1646.6    10006.9    1646.9    10016.5    1646.4    10026.7
GR   1645.5    10032.3    1646.0    10037.5    1646.8    10044.0    1647.2    10049.7    1647.4    10057.1
GR   1648.0    10065.7    1648.3    10073.7    1648.8    10081.2    1649.6    10088.3    1649.4    10099.3
GR   1649.4    10106.2    1649.6    10115.9    1649.2    10124.9    1649.1    10135.0    1648.6    10143.9
GR   1648.4    10153.0    1647.5    10158.5    1647.1    10165.2    1646.3    10171.0    1645.8    10176.0
GR   1645.4    10178.9    1646.5    10185.7    1647.2    10192.4    1647.8    10198.0    1648.4    10203.1
GR   1649.1    10209.7    1649.8    10216.7    1649.7    10225.8    1649.3    10233.0    1648.6    10243.8
GR   1647.0    10256.4    1646.4    10262.7    1647.4    10267.9    1648.5    10275.7    1648.5    10286.3
GR   1648.5    10301.2    1648.4    10315.2    1647.9    10323.6    1647.3    10332.8    1647.2    10340.9
GR   1648.1    10347.8    1648.5    10358.7    1648.9    10362.6    1649.7    10368.7    1650.0    10377.1
!
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GR   1650.1    10385.9    1650.6    10394.6    1650.9    10406.1    1651.1    10416.3    1650.9    10425.2
GR   1650.9    10435.6    1650.9    10447.6    1650.8    10463.7    1651.1    10477.7    1651.0    10492.0
GR   1651.0    10504.0    1650.7    10516.3    1651.1    10524.0    1651.3    10532.0    1651.3    10532.3

DT        2        401        401
ET                 7.1        9.1                                   9890.5    10256.2       9963      10050
        ET APPLIED AT SEC. 2.2538 AND 2.2812 TO PREVENT INEFFECTIVE FLOW TO
        LEFT OF RIDGE ON LEFT.
X1   2.2538         63     9975.1     9989.2       675        675       605
GR   1662.1     9415.4    1662.1     9443.4    1661.8     9469.8    1661.2     9491.0    1660.9     9511.2
GR   1660.4     9533.9    1659.9     9552.0    1659.9     9570.5    1660.0     9585.3    1659.8     9604.3
GR   1659.6     9621.5    1659.1     9642.5    1658.1     9665.7    1656.6     9694.9    1656.6     9711.9
GR   1656.7     9724.3    1655.5     9740.2    1655.4     9746.5    1653.9     9750.8    1655.3     9753.4
GR   1655.5     9764.7    1655.1     9773.2    1656.4     9782.5    1658.1     9792.7    1659.8     9808.0
GR   1661.0     9825.8    1661.2     9850.9    1661.4     9873.8    1661.6     9890.5    1661.2     9908.0
GR   1660.1     9924.9    1659.1     9939.0    1657.4     9952.7    1656.3     9967.1    1656.4     9975.1
GR   1653.9     9984.2    1656.2     9989.2    1656.2    10000.0    1656.3    10000.1    1656.3    10000.2
GR   1655.9    10009.1    1656.6    10017.9    1656.4    10028.9    1656.7    10041.1    1654.5    10049.9
GR   1654.7    10058.7    1655.4    10064.3    1653.9    10071.1    1656.3    10080.1    1657.1    10089.8
GR   1656.9    10099.5    1656.8    10108.3    1657.2    10117.3    1657.9    10125.8    1658.8    10135.5
GR   1659.0    10151.3    1659.4    10163.3    1660.2    10173.7    1660.8    10183.6    1661.4    10212.6
GR   1660.9    10223.0    1661.1    10240.3    1661.2    10256.2

ET                 7.1        9.1                                   9900.4    10241.9    10015.7     10190
X1   2.2812         95    10015.7    10042.3       100        160       145
GR   1668.1     9161.8    1667.8     9175.4    1667.5     9192.4    1666.5     9206.6    1666.0     9225.0
GR   1665.3     9239.4    1665.0     9256.4    1664.1     9273.5    1664.3     9280.6    1664.8     9287.1
GR   1663.8     9299.0    1663.5     9309.1    1664.0     9317.8    1664.0     9331.6    1664.1     9345.6
GR   1664.4     9355.8    1664.1     9369.0    1663.8     9383.7    1662.7     9391.9    1663.8     9398.3
GR   1663.7     9406.0    1663.2     9416.3    1662.5     9424.7    1662.4     9433.5    1661.3     9443.7
GR   1660.3     9450.0    1661.0     9457.3    1662.2     9463.0    1664.8     9471.7    1666.6     9477.7
GR   1666.9     9488.5    1665.9     9501.3    1664.8     9514.4    1662.7     9527.0    1662.3     9537.8
GR   1660.8     9548.1    1660.3     9555.2    1661.1     9566.7    1660.4     9579.0    1660.9     9596.2
GR   1660.4     9607.5    1660.4     9618.2    1659.7     9626.6    1659.7     9634.2    1660.3     9642.1
GR   1660.7     9650.5    1661.7     9655.3    1663.2     9666.2    1663.6     9677.3    1663.0     9687.6
GR   1661.7     9698.9    1661.2     9706.9    1660.3     9713.8    1661.7     9720.5    1662.5     9725.1
GR   1664.0     9736.5    1665.3     9745.0    1665.5     9760.5    1665.1     9778.9    1665.4     9793.9
GR   1665.5     9836.5    1664.6     9900.4    1664.0     9915.2    1664.4     9933.1    1662.9     9947.2
GR   1660.4     9960.3    1657.9     9974.4    1657.3     9984.0    1657.0     9996.1    1656.6    10000.0
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GR   1656.6    10000.1    1656.6    10015.7    1658.4    10030.3    1658.7    10042.3    1657.4    10064.0
GR   1658.0    10063.6    1659.2    10070.4    1660.1    10077.5    1660.3    10094.0    1660.4    10107.8
GR   1659.7    10120.5    1659.0    10131.2    1657.7    10135.6    1656.8    10151.7    1656.3    10162.6
GR   1656.2    10175.6    1657.0    10185.2    1657.7    10193.3    1658.9    10199.0    1659.8    10208.0
GR   1660.7    10214.1    1661.0    10221.8    1661.7    10228.1    1662.0    10234.2    1662.0    10241.9

NC      .07       .07       .07        .3        .5
        BEGIN SUN VALLEY PARKWAY CULVERTS 6-10'X4'R.C.BOXES (STRUC.#6) AND
        2-10'X3' R.C.BOXES (STRUC.#7) MODELED AS COMBINED BRIDGE IN HEC2.
X1   2.2869         8     9959.5    10040.5        30        30        30
X3       10                                                          1662.4    1662.4
GR   1667.0      9900      1666      9918    1661.7     9959.5    1657.7    9959.5    1657.7   10040.5
GR   1661.7    10040.5      1659   10040.5      1660     10160
1
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NC     .012      .012      .012
BB      .95      1.65      2.63                 51         6       300         0    1658.4    1657.7
        END SUN VALLEY PARKWAY CULVERTS
X1   2.3134         9     9959.5    10040.5       140       140       140
X2                             1     1662.4    1661.5
X3       10                                                          1662.4    1662.4
BT       12      9900   1667.13                10000    1666.4                10082.5   1665.85
BT    10193    1665.0              10309.9    1663.8                 10310    1663.3                 10350
BT   1662.5               10358    1662.1                 10362    1661.5                 10367    1661.5
BT              10375    1663.5                10385    1665.5
GR     1669      9910    1662.4     9959.5    1658.4     9959.5    1658.4   10040.5    1662.4   10040.5
GR   1662.4     10205    1658.4     10205    1658.4     10250    1662.4     10250

NC      .03       .03       .03
X1   2.3210        11      9961     10040        40        40        40
GR     1668      9920      1666      9938      1660      9961    1659.5     10000      1660     10040
GR     1663     10052      1664     10100      1662     10165      1660     10213    1659.5     10232
GR     1663     10262

NC     .049      .049      .045        .1        .3
BT        2      1250      1250
ET                          9.1                                                          9649.2   10018.8
        REPEAT CROSS-SECTION FOR START OF WASH #2 TRIBUTARY
X1   -1.555        95     9949.2    9976.6       640       685       705
GR   1612.5     9300.5    1612.4    9344.6    1612.1    9360.9    1612.0    9423.0    1611.2    9437.2
GR   1610.0     9449.1    1611.2    9461.7    1611.8    9473.7    1611.5    9485.4    1611.7    9500.4
GR   1611.2     9513.9    1611.6    9522.3    1611.2    9532.2    1609.8    9537.1    1611.1    9540.3
GR   1611.4     9551.9    1611.3    9569.4    1609.8    9579.3    1611.9    9587.9    1612.3    9599.1
GR   1612.1     9614.5    1612.3    9628.9    1611.6    9639.4    1610.7    9645.1    1611.6    9653.7
GR   1612.0     9666.0    1611.7    9678.5    1611.4    9688.6    1611.5    9696.3    1612.1    9706.0
GR   1612.1     9721.8    1612.0    9735.1    1612.2    9746.4    1612.2    9758.8    1612.4    9773.2
GR   1612.9     9786.7    1612.8    9798.9    1612.7    9812.3    1612.9    9831.3    1612.4    9847.3
GR   1612.1     9860.6    1612.5    9877.6    1612.0    9893.1    1611.6    9909.6    1610.8    9915.7
GR   1611.9     9920.6    1611.6    9939.7    1611.7    9937.9    1611.7    9949.2    1610.2    9959.4
GR   1610.4     9967.2    1611.0    9971.7    1611.8    9976.6    1611.6    9986.6    1611.9    9994.2
GR   1611.6     9998.1    1611.0   10000.0    1611.0   10000.1    1611.2   10015.8    1611.2   10030.0
GR   1611.2    10040.9    1611.2   10048.1    1610.2   10056.5    1610.3   10061.5    1611.9   10068.2
GR   1610.9    10080.2    1611.4   10086.6    1611.0   10099.0    1611.1   10106.3    1611.5   10114.0
GR   1611.4    10123.2    1611.4   10128.1    1611.5   10137.8    1610.8   10145.4    1611.3   10152.1
GR   1611.4    10214.1    1611.6   10222.4    1611.6   10230.4    1610.6   10238.6    1611.4   10243.3
GR   1611.7    10251.7    1612.4   10259.8    1612.5   10270.7    1612.9   10281.3    1612.7   10290.3
GR   1613.1    10300.5    1613.1   10313.6    1613.4   10325.4    1613.0   10339.1    1613.0   10354.8
GR   1612.8    10362.9    1613.2   10372.7    1613.2   10382.4    1613.4   10395.7    1613.0   10409.7

BT        2       859       859
ET                          9.1                                                         10805.86    10920
        ADD 10 TO CROSS-SECTION I.D. FOR TRIBUTARY. STATION 10870 =TRIB BASELINE
X1   11.711        65    10877.8   10920.0       900       700       650
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GR   1622.2     10306.7     1621.7     10322.3     1622.3     10335.4     1622.4     10349.7     1622.5     10365.5
GR   1622.0     10380.1     1622.4     10395.2     1622.5     10414.6     1622.5     10431.2     1622.4     10449.9
GR   1622.5     10465.7     1621.7     10478.8     1622.1     10491.4     1621.9     10510.5     1621.9     10524.7
GR   1621.9     10541.0     1621.6     10559.1     1621.3     10566.1     1621.0     10572.4     1621.8     10583.3
GR   1621.6     10594.9     1621.6     10603.5     1621.4     10622.1     1621.1     10639.7     1620.1     10649.9
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GR   1620.7     10656.9     1620.6     10669.3     1620.9     10684.1     1620.8     10696.5     1621.0     10708.0
GR   1621.3     10720.7     1620.7     10738.6     1620.4     10750.0     1620.5     10761.0     1620.8     10766.3
GR   1620.7     10778.5     1620.3     10786.3     1620.8     10793.9     1620.1     10803.5     1620.2     10809.8
GR   1620.4     10817.4     1620.0     10827.0     1620.2     10838.7     1620.4     10852.1     1620.0     10859.5
GR   1619.9     10872.7     1620.5     10886.4     1620.3     10897.8     1620.3     10909.9     1619.5     10914.5
GR   1620.0     10920.0     1620.0     10930.6     1620.6     10942.0     1620.9     10954.6     1620.8     10973.2
GR   1620.8     10991.1     1620.8     11005.6     1621.1     11026.3     1620.8     11046.5     1620.9     11067.0
GR   1621.3     11084.1     1621.5     11097.3     1621.5     11097.4

ET                          9.1                                                                 11391.06     11491.6
        ADD 10 TO SECTION I.D. FOR TRIBUTARY. STATION 11475 =TRIB. BASELINE.
X1   11.855         57    11463.7    11491.6         725         775         775
GR   1631.2     11051.6     1631.7     11064.3     1631.9     11075.8     1631.2     11095.3     1631.2     11098.2
GR   1631.7     11109.3     1631.3     11121.9     1631.5     11134.7     1631.4     11148.5     1631.4     11163.0
GR   1631.7     11176.4     1630.6     11189.4     1630.4     11197.5     1630.6     11206.0     1630.1     11218.5
GR   1628.9     11225.0     1630.3     11235.8     1630.8     11246.5     1631.2     11258.3     1631.7     11268.6
GR   1631.9     11276.4     1631.6     11292.6     1630.1     11307.9     1630.7     11317.2     1630.5     11327.6
GR   1631.6     11337.2     1631.3     11348.7     1629.9     11358.5     1628.9     11367.1     1629.0     11373.7
GR   1628.8     11382.5     1629.9     11388.7     1629.9     11396.4     1630.0     11405.9     1630.6     11415.1
GR   1630.7     11425.5     1630.5     11434.0     1630.5     11444.4     1630.3     11454.2     1629.9     11463.7
GR   1629.4     11480.9     1628.0     11485.9     1628.9     11491.6     1629.6     11499.2     1629.5     11504.4
GR   1629.9     11509.8     1629.5     11517.4     1629.9     11525.3     1629.5     11532.7     1629.9     11541.1
GR   1629.5     11549.7     1629.9     11559.3     1630.2     11568.5     1630.4     11577.2     1630.6     11588.0
GR   1630.7     11599.6     1630.9     11611.4

ET                  7.1         9.1                                     11895.4     12109.4     12032.0     12075.2
        ADD 10 TO SECTION I.D. FOR TRIBUTARY.  STATION 12065 =TRIB. BASELINE.
        ET APPLIED TO PREVENT INEFFECTIVE FLOW TO RIGHT OF RIDGE ON RIGHT.
X1   11.967         35    12032.0    12075.2         615         550         585
GR   1639.3     11875.4     1638.9     11913.9     1638.4     11937.8     1638.6     11953.5     1638.7     11967.7
GR   1638.3     11987.1     1637.9     11994.1     1636.4     12004.1     1635.8     12017.6     1634.9     12032.0
GR   1634.7     12045.0     1634.6     12059.7     1634.4     12070.3     1635.3     12078.2     1636.5     12086.6
GR   1637.7     12097.4     1639.3     12109.4     1638.3     12122.1     1638.1     12138.3     1638.5     12155.4
GR   1636.9     12163.4     1635.5     12174.9     1634.5     12186.0     1634.1     12199.6     1634.1     12212.4
GR   1634.1     12224.0     1633.7     12240.7     1634.4     12247.5     1635.7     12258.1     1637.2     12270.5
GR   1637.6     12284.3     1637.0     12300.8     1637.9     12316.3     1637.0     12325.5     1637.7     12333.9

NC      .03         .03         .03          .3          .5
        ADD 10 TO SECTION I.D. FOR TRIBUTARY.  BEGIN SUN VALLEY PARKWAY CULVERTS
X1   11.975          6       9965       10032          40          40          40
X3      10                                                                      1641.8      1641.8
GR    1640        9910        1640        9968      1636.4        9968      1636.4       10032        1640       10032
GR   1638.5       10070

NC    .012        .012        .012
SC   5.012          .2         2.7           0           4          12         145        12.3      1637.8      1636.4
        ADD 10 TO SECT. I.D.  END PARKWAY CULVERTS (5-12'X4' R.C.B.'S STRUC.#11)
X1   12.002          6       9968       10032         145         145         145
X2                                          2     1641.8      1641.0
X3      10                                                                      1640.5      1641.0
BT       9       10000      1644.1                10020.9      1644.0                 10021      1643.5
BT   10061      1642.7                 10069      1642.3                 10092      1642.0                 10093
BT    1641                   10258      1641                   10265      1642
GR   1641.0        9900      1641.0        9968      1637.8        9968      1637.8       10032      1641.0       10032
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5R   1641.0      10100

NC      .03        .03        .03
ET                 7.1        9.1                                          9930       10048       9930       10048
        ET APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE OF WEIR LEVEES ON LEFT\RT.
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFFECTIVE FLOW LIMITS IS POSSIBLE AND DETENTION REQUIRES
        PRESERVATION UPSTREAM OF ROAD.
XI   12.013        10       9930      10048        60         60         60
3R   1645.2      9352     1640.3      9372     1639.7       9360     1638.8       9905     1640.3       9917
6R   1640.5      9930     1639.5      9942       1639      10000     1639.5      10043       1641      10048
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         DLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XML        XNCH       XNR        WTN        ELMIN      BETA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      ICRAR      TOPWID     ENDST


*PROF 1

CCHV=     .100 CEHV=     .300
*SECNO  .107

3470 ENCROACHMENT STATIONS=     9469.7   10030.4  TYPE=      1  TARGET=      560.700
        FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
        MODEL RESULTS USING EQUAL CONVEYANCE REDUCTION (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH NO. 1 ALONG BASELINE.
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        ET APPLIED TO PREVENT INEFFECTIVE FLOW TO RIGHT OF RIDGE ON RIGHT.
     .107      5.40   1536.50       .00       .00   1536.70       .20       .00       .00   1534.90
   1293.0     508.6     502.5     282.0     268.9     101.1      94.8        .0        .0   1534.70
     .00      1.89      4.97      2.97      .049      .045      .049      .000   1531.10   9480.10
  .005959        0.        0.        0.         0         0         0       .00    547.84  10027.94


*SECNO  .220

3265 DIVIDED FLOW


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

     .220      3.00   1541.60   1541.53       .00   1541.93       .33      5.19       .04   1539.90
   1293.0     287.1     358.5     647.5     109.0      58.2     153.6       3.4       6.6   1540.40
     .04      2.63      6.16      4.22      .049      .045      .049      .000   1538.60   9606.02
  .013645      590.      600.      610.        12        11         0       .00    422.94  10176.77


*SECNO  .352

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9708.4   10507.2  TYPE=      1  TARGET=      798.800
        ET APPLIED TO PREVENT INEFFECTIVE FLOW TO LEFT OF RIDGE ON LEFT.
     .352      3.39   1548.69       .00       .00   1548.83       .13      6.88       .02   1548.20
   1293.0     139.2     233.5     920.3      79.1      54.2     348.1      11.8      15.2   1548.30
     .10      1.76      4.31      2.64      .049      .045      .049      .000   1548.10   9760.59
  .007641      700.      675.      690.         7         0         0       .00    648.04  10466.50
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SECNO	DEPTH	QWSEL	QRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

#SECNO .481

3265 DIVIDED FLOW

.481	3.06	1555.16	1555.02	.00	1555.28	.11	6.45	.00	1555.10
1293.0	225.7	117.6	949.7	121.2	25.4	370.4	19.8	28.6	1556.00
.18	1.86	4.63	2.56	.049	.045	.049	.000	1552.10	9570.40
.011179	690.	740.	700.	15	13	0	.00	1025.92	10671.46

#SECNO .611

3265 DIVIDED FLOW

.611	2.31	1561.31	.00	.00	1561.57	.09	6.31	.00	1561.00
1293.0	149.3	88.0	1055.7	89.5	31.8	436.9	28.2	43.8	1561.00
.26	1.67	2.77	2.42	.049	.045	.049	.000	1559.20	9743.00
.007822	700.	700.	675.	5	0	0	.00	915.41	10775.14

#SECNO .738

3265 DIVIDED FLOW

.738	2.17	1567.37	.00	.00	1567.51	.14	5.90	.01	1566.10
1293.0	474.1	125.7	693.2	141.0	26.6	327.5	36.3	57.5	1566.30
.33	3.36	4.73	2.12	.049	.045	.049	.000	1565.20	9878.97
.009932	675.	675.	670.	5	0	0	.00	867.10	10760.93

#SECNO .873

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9450.0 10270.7 TYPE= 1 TARGET= 820.700
ET APPLIED AT SEC..8731 AND 1.0133 TO PREVENT INEFFECTIVE FLOW TO
RIGHT OF RIDGE ON RT.

.873	2.16	1574.16	.00	.00	1574.28	.13	6.75	.00	1574.20
1293.0	1185.8	25.1	82.1	405.1	8.8	45.7	44.2	69.8	1574.10
.008916	720.	730.	720.	.049	.045	.049	.000	1572.00	9576.36
				5	0	0	.00	520.51	10259.90

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

#SECNO 1.013

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9238.0 10173.9 TYPE= 1 TARGET= 935.900

1.013	2.76	1581.26	.00	.00	1581.40	.14	7.12	.00	1580.00
1273.0	1146.3	83.9	42.3	376.7	29.4	17.8	51.2	91.0	1581.20
.46	3.04	2.86	2.38	.049	.045	.049	.000	1578.50	9246.91
.011959	690.	735.	725.	6	0	0	.00	782.76	10082.07

*SECNO 1.151

3265 DIVIDED FLOW

1.151	1.84	1588.94	.00	.00	1589.10	.16	7.59	.01	1589.20
1273.0	1234.7	32.6	5.8	382.9	14.5	3.0	57.8	91.2	1589.70
.52	3.22	2.24	1.91	.049	.045	.049	.000	1587.10	9346.23
.010323	690.	750.	700.	5	0	0	.00	494.00	10051.49

*SECNO 1.288

3265 DIVIDED FLOW

1.288	2.46	1596.96	.00	.00	1597.13	.16	8.03	.00	1597.10
1273.0	1086.2	186.8	.0	343.8	50.6	.0	64.3	99.9	1597.00
.58	3.16	3.69	.00	.049	.045	.000	.000	1594.50	9366.52
.012478	705.	750.	705.	2	0	0	.00	574.19	10051.95

*SECNO 1.425

1.425	1.23	1604.73	.00	.00	1604.83	.10	7.69	.01	1604.30
1250.0	778.7	72.8	398.5	319.2	29.6	154.6	71.6	110.6	1604.50
.66	2.44	2.46	2.58	.049	.045	.049	.000	1603.50	9397.16
.009514	700.	760.	715.	5	0	0	.00	749.22	10146.38

*SECNO 1.555

3265 DIVIDED FLOW

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	DLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	NLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1.555	2.21	1612.01	.00	.00	1612.16	.15	7.32	.02	1611.70
1250.0	558.3	139.4	554.8	181.8	33.0	198.9	78.5	120.9	1611.80
.72	3.06	4.23	2.91	.049	.045	.049	.000	1609.80	9418.45
.012965	640.	705.	685.	7	0	0	.00	607.44	10255.26

*SECNO 1.719

3265 DIVIDED FLOW

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

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   1.919      1.75   1621.15      .00      .00   1621.22      .07      9.75      .03   1621.00
   419.0     134.2      49.7     344.9     73.1      13.4     105.7     84.2     127.9   1626.70
     .83      1.70      2.71      2.25     .049      .045      .049     .000   1619.40   9753.75
  .007122      730.      850.      875.        6         0         0      .00    362.90  10270.88


*SECNO 1.631

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9649.5   10141.5  TYPE=      1  TARGET=      492.000
       ET APPLIED AT SEC. 1.8314, 1.9975 AND 2.1231 TO PREVENT INEFFECTIVE FLOW
       TO RIGHT OF RIDGE ON RIGHT.
   1.831      2.75   1627.75   1627.75      .00   1628.03      .27      4.80      .06   1626.90
   419.0      24.0     295.2      99.7     15.9      60.4     57.0     86.4     133.9   1627.70
     .87      1.51      4.99      1.75     .049      .045     .049     .000   1625.00   9860.76
  .009426      550.      570.      605.        4        16         0      .00    227.82  10111.35


*SECNO 1.993
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9619.0   10158.9  TYPE=      1  TARGET=      589.900
   1.993      3.06   1637.34   1637.34      .00   1637.89      .55      9.14      .08   1636.40
   419.0      91.5     321.4       6.1     29.2      48.9      2.1     58.3     136.5   1635.90
     .90      3.13      6.57      2.90     .049      .045     .049     .000   1634.30  10050.03
  .016379      750.      750.      750.        9         8         0      .00     72.59  10122.72


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


*SECNO 2.123

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9799.1   10115.9  TYPE=      1  TARGET=      316.801
   2.123      2.54   1647.74      .00      .00   1647.90      .16      9.97      .04   1648.00
   407.0      21.0     165.3     220.1     12.1      46.2     74.4     90.4     138.7   1648.00
     .98      1.74      3.59      2.96     .049      .045     .049     .000   1645.20   9844.77
  .008136      850.      935.      800.        6         0         0      .00    154.83  10061.93


*SECNO 2.254

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9890.5   10256.2  TYPE=      1  TARGET=      365.700
       ET APPLIED AT SEC. 2.2938 AND 2.2512 TO PREVENT INEFFECTIVE FLOW TO
       LEFT OF RIDGE ON LEFT.
   2.254      2.42   1656.72   1656.72      .00   1656.79      .48      8.76      .13   1654.40
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   401.0       .0      85.5     305.5       .0      17.0      35.4      72.0     140.5   1656.20
    1.03      .05      5.63      5.51     .040      .005      .049      .000   1653.90   9966.67
 .027302     675.      665.      675.        4         5         0       .00     76.24  10080.31


%SECNO 2.281

3263 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.32


3470 ENCROACHMENT STATIONS=     9900.4   10241.9  TYPE=      1  TARGET=      341.500
   2.281      1.93   1658.03       .00       .00   1658.13       .10      1.29       .04   1656.60
   401.0      88.0     115.9     197.0      40.5      40.1      83.2      92.4     140.9   1656.70
    1.03      2.18      2.39      2.37      .049      .045      .049      .000   1656.20   9973.67
 .004439      100.      145.      160.         5         0         0       .00    147.50  10194.87


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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         OLOB      OCH       OROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     KLOBL     KLCH      KLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=     .300 CEHV=     .500
%SECNO 2.287
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=     1662.40 ELREA=     1662.40

        BEGIN SUN VALLEY PARKWAY CULVERTS 6-10'X4'R.C.BOXES (STRUC.#6) AND
        2-10'X3' R.C.BOXES (STRUC.#7) MODELED AS COMBINED BRIDGE IN HEC2.
   2.287       .91   1658.61   1658.61       .00   1659.07       .46       .22       .18   1661.70
   401.0        .0     401.0        .0        .0      73.6        .0      92.5     141.0   1661.70
    1.03       .00      5.45       .00      .000      .030      .000      .000   1657.70   9959.50
 .014139       30.       30.       30.        20         8         0       .00     81.00  10040.50


SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1658.44 , NOT    1658.61 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFD      RDLEN     BWC       BWP       BAREA     SB        ELCHU     ELCHD
     .95      1.65      2.63       .00     81.00      6.00    300.00       .00   1658.40   1657.70

%SECNO 2.313

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.19

CLASS B LOW FLOW

3420 BRIDGE W.S.=    1659.01 BRIDGE VELOCITY=       5.55     CALCULATED CHANNEL AREA=       46.

 SBPRS      EBLWC       HC      QWEIR      QLOW      BAREA   TRAPEZOID      ELLC      ELTRD     WEIRLN
                                                             AREA
     .00   1657.89       .00        0.      401.      300.      300.     1662.40   1661.50        0.
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3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLIB=      1662.40 ELREA=      1662.40

        END SUN VALLEY PARKWAY CULVERTS
    2.313      1.24   1659.54       .00       .00   1659.89       .35       .82       .00   1662.40
    401.0        .0     401.0        .0        .0     100.7        .0      92.7     141.2   1662.40
     1.04       .00      3.98       .00      .000      .012      .000      .000   1658.40   9959.50
  .000805      140.      140.      140.         0         0         0       .00     81.00  10040.50


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


*SECNO 2.321

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.321      1.02   1660.52   1660.52       .00   1660.88       .35       .05       .05   1660.00
    401.0       1.2     301.4      98.3        .5      61.0      23.0      92.8     141.3   1660.00
     1.05      2.35      4.94      4.28      .030      .030      .030      .000   1659.50   9959.00
  .014034       40.       40.       40.        20        15         0       .00    123.40  10240.76


CCHV=     .100 CEHV=     .300
*SECNO -1.555
START TRIB COMP
   -1.555     1.555  1612.008

3265 DIVIDED FLOW

        REPEAT CROSS-SECTION FOR START OF WASH #2 TRIBUTARY
   -1.555      2.21   1612.01       .00       .00   1612.16       .15       .00       .00   1611.70
   1250.0     555.8     139.4     554.8     181.9      33.0     191.0      96.6     146.9   1611.80
     1.11      3.06      4.23      2.90      .049      .045      .049      .000   1609.80   9418.30
  .012552       640.      705.      685.         0         0         0       .00    607.66  10255.26


*SECNO 11.711

3265 DIVIDED FLOW

        ADD 10 TO CROSS-SECTION I.D. FOR TRIBUTARY. STATION 10870 =TRIB BASELINE
   11.711      1.82   1621.32       .00       .00   1621.44       .12      9.28       .00   1620.30
    959.0     564.6     101.1     193.3     208.7      27.6      88.5     103.5     157.0   1620.00
     1.19      2.70      3.66      2.18      .049      .045      .049      .000   1619.50  10569.84
  .009242       900.      950.      700.         6         0         0       .00    466.15  11035.71


*SECNO 11.855

3265 DIVIDED FLOW

        ADD 10 TO SECTION I.D. FOR TRIBUTARY. STATION 11475 =TRIB. BASELINE.
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        DLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


   11.855      2.52   1630.52   1630.49       .00   1630.88       .35      9.36       .07   1629.90
   859.0     327.9     292.1     239.0      82.7      47.0      66.3     107.9     163.2   1628.90
    1.34      3.97      6.22      3.60      .049      .045      .049      .000   1628.00  11192.64
  .017844     725.      775.      775.         4        14         0       .00    264.30  11587.66


XSECNO 11.967

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.49


3470 ENCROACHMENT STATIONS=    11995.4   12109.4  TYPE=      1  TARGET=      214.000
        ADD 10 TO SECTION I.D. FOR TRIBUTARY.  STATION 12065 =TRIB. BASELINE.
        ST APPLIED TO PREVENT INEFFECTIVE FLOW TO RIGHT OF RIDGE ON RIGHT.
   11.967      3.35   1637.25       .00       .00   1637.66       .41      6.77       .02   1636.90
   859.0     164.0     654.0      41.0      45.3     118.2      13.9     110.5     165.7   1635.30
    1.27      3.62      5.53      2.95      .049      .045      .049      .000   1633.70  11998.43
  .005035     615.      585.      550.         4         0         0       .00     94.92  12093.35


CCHV=     .300 CEHV=     .500
XSECNO 11.975
3495 20 TRIALS ATTEMPTED WSEL,CWSEL
3493 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1641.80 ELREA=      1641.80

        ADD 10 TO SECTION I.D. FOR TRIBUTARY.  BEGIN SUN VALLEY PARKWAY CULVERTS
   11.975      1.77   1638.17   1638.17       .00   1639.06       .89       .39       .24   1640.00
   859.0        .0     859.0        .0        .0     113.2        .0     110.6     165.7   1640.00
    1.27       .00      7.59       .00      .000      .030      .000      .000   1636.40   9988.00
  .011773      40.       40.       40.        20         6         0       .00     64.00  10032.00



SPECIAL CULVERT

SC  CUND      CUNV      ENTLC     CDFD      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    5         .012      .20       2.70      .00       4.00      12.00     145.00    12        3         1637.80   1636.40

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

XSECNO 12.002
1
   06MAY93      11:30:45                                                                                PAGE   20


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


SPECIAL CULVERT OUTLET CONTROL
EDIC =   1640.719  EDSC =   1640.765  PCWSE=   1638.169  ELTRD=   1641.000
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3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.47

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1640.72	1640.77	1.70	0.	859.	5.307	240.0	1641.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1640.50 ELREA= 1641.00

ADD 10 TO SECT. I.D. END PARKWAY CULVERTS (5-12'X4' R.C.B.'S STRUC.#11)

12.002	2.53	1640.33	.00	.00	1640.77	.44	1.70	.00	1641.00
859.0	.0	859.0	.0	.0	161.9	.0	111.0	165.9	1641.00
1.28	.00	5.31	.00	.000	.012	.000	.000	1637.80	9960.00
.000590	145.	145.	145.	3	0	0	.00	64.00	10032.00

*SECNO 12.013
3685 20 TRIALS ATTEMPTED WSEL,DWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9930.0 10046.0 TYPE= 1 TARGET= 119.000
ET APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE OF WEIR LEVEES ON LEFT\RT.
FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
BEYOND EFFECTIVE FLOW LIMITS IS POSSIBLE AND DETENTION REQUIRES
PRESERVATION UPSTREAM OF ROAD.

12.013	1.73	1640.53	1640.53	.00	1641.14	.61	.10	.08	1640.50
859.0	.0	859.0	.0	.0	137.6	.0	111.3	166.1	100000.00
1.28	.00	6.24	.00	.000	.030	.000	.000	1638.80	9930.00
.012748	60.	60.	60.	20	19	0	.00	116.44	10046.44

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T1 SUN VALLEY PARKWAY NORTH FIS CONTRACT:FCDMC NO. 90-04
T2 100-YEAR WATER SURFACE PROFILE A-N WEST INC. PHX.AZ
T3 WASH NO. 2 FLOODWAY

J1 ICHECK INQ NINV IDIR STRT METRIC HVINS Q WSEL FB

-10 3 0 1537.50

J2 NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBW CHNIM ITRACE

15 -1

1

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

*NPROF 2
0

CONV= .100 DEHV= .300

```
*SECNO  .107

3470 ENCROACHMENT STATIONS=     9918.3    9995.6  TYPE=      1  TARGET=       77.311
        FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
        MODEL RESULTS USING EQUAL CONVEYANCE REDUCTION (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH NO. 1 ALONG BASELINE.
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        ET APPLIED TO PREVENT INEFFECTIVE FLOW TO RIGHT OF RIDGE ON RIGHT.
      .107      6.40   1537.50       .00   1536.50   1537.97       .47       .00       .00   1534.90
    1293.0        .0     832.9     460.1        .0     137.7     104.2        .0        .0   1534.70
       .00       .00      6.05      4.41      .000      .045      .049      .000   1531.10   9918.30
   .006397        0.        0.        0.         0         0         0       .00     77.31   9995.61


*SECNO  .220

3470 ENCROACHMENT STATIONS=     9986.0   10081.0  TYPE=      1  TARGET=       95.000
      .220      5.90   1542.50       .00   1541.60   1543.09       .60      5.08       .04   1539.90
    1293.0     333.4     603.2     356.4      65.0      83.4      69.0       3.2       1.2   1540.40
       .03      5.13      7.24      5.17      .049      .045      .049      .000   1538.60   9986.00
   .011665      590.      600.      610.         3         0         0       .00     95.00  10081.00


*SECNO  .352

3470 ENCROACHMENT STATIONS=    10053.2   10188.1  TYPE=      1  TARGET=      132.899
        ET APPLIED TO PREVENT INEFFECTIVE FLOW TO LEFT OF RIDGE ON LEFT.
      .352      4.34   1549.44       .00   1548.69   1549.79       .34      6.67       .03   1549.20
    1293.0        .0     413.2     879.8        .0      75.9     203.5       7.1       3.0   1546.30
       .07       .00      5.44      4.32      .000      .045      .049      .000   1545.10  10053.20
   .008236      700.      675.      690.         5         0         0       .00    132.90  10188.10


*SECNO  .481
3280 CROSS SECTION       .48 EXTENDED       .30 FEET

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


3470 ENCROACHMENT STATIONS=     9990.0   10200.0  TYPE=      1  TARGET=      210.000
      .481      4.10   1556.20       .00   1555.16   1556.50       .30      6.71       .00   1555.10
    1293.0     146.1     253.1     893.7      36.6      42.5     227.3      11.8       5.8   1556.00
       .11      3.99      5.76      3.93      .049      .045      .049      .000   1552.10   9990.00
   .010971      690.      740.      700.         4         0         0       .00    210.00  10200.00


*SECNO  .611

3470 ENCROACHMENT STATIONS=    10000.0   10250.0  TYPE=      1  TARGET=      250.000
      .611      3.17   1562.37       .00   1561.51   1562.57       .20      6.05       .01   1561.00
    1293.0     164.3     253.3     875.5      49.2      61.2     256.4      17.1       9.4   1561.00
       .17      3.34      4.14      3.41      .049      .045      .049      .000   1559.20  10000.00
   .007313      700.      700.      675.         5         0         0       .00    250.00  10250.00
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*SECNO  .738

3470 ENCROACHMENT STATIONS=    10007.5   10237.1  TYPE=      1  TARGET=      229.600
      .738      2.97   1568.17       .00   1567.37   1568.44       .27      5.85       .02   1566.10
    1293.0        .0     223.0    1070.0        .0      38.7     282.0      22.4      13.1   1566.30
      .21       .00      5.76      3.79      .000      .045      .049      .000   1565.20  10007.50
   .010551      675.      675.      670.         4         0         0       .00    229.60  10237.10


*SECNO  .873

3265 DIVIDED FLOW

3280 CROSS SECTION       .87 EXTENDED       .78 FEET


3470 ENCROACHMENT STATIONS=     9884.6   10217.2  TYPE=      1  TARGET=      332.601
        ET APPLIED AT SEC..8731 AND 1.0133 TO PREVENT INEFFECTIVE FLOW TO
        RIGHT OF RIDGE ON RT.
      .873      2.98   1574.98       .00   1574.16   1575.17       .19      6.72       .01   1574.20
    1293.0     841.0      69.1     382.9     223.1      16.6     141.6      28.2      17.7   1574.10
      .27      3.77      4.17      2.70      .049      .045      .049      .000   1572.00   9884.60
   .008296      720.      730.      720.         6         0         0       .00    331.38  10217.20


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


*SECNO 1.013
3280 CROSS SECTION      1.01 EXTENDED       .04 FEET


3470 ENCROACHMENT STATIONS=     9796.7   10032.7  TYPE=      1  TARGET=      236.000
     1.013      3.53   1582.03       .00   1581.26   1582.31       .27      7.11       .02   1580.00
    1273.0     965.6     307.2        .0     235.1      70.0        .0      33.8      22.3 100000.00
      .32      4.11      4.39       .00      .049      .045      .000      .000   1578.50   9796.70
   .012706      690.      735.      725.         5         0         0       .00    236.00  10032.70


*SECNO 1.151

3470 ENCROACHMENT STATIONS=     9700.0    9976.7  TYPE=      1  TARGET=      276.700
     1.151      2.77   1589.87       .00   1588.94   1590.09       .22      7.78       .00   1589.20
    1273.0    1096.3     176.7        .0     290.7      46.0        .0      38.9      24.4 100000.00
      .37      3.77      3.84       .00      .049      .045      .000      .000   1587.10   9700.00
   .009774      690.      750.      700.         5         0         0       .00    276.70   9976.70


*SECNO 1.288

3470 ENCROACHMENT STATIONS=     9700.0   10052.3  TYPE=      1  TARGET=      352.300
     1.288      3.16   1597.66       .00   1596.96   1597.90       .28      7.80       .01   1597.10
    1273.0     836.1     436.9        .0     254.7      86.4        .0      44.5      31.5 100000.00
      .42      3.28      5.06       .00      .049      .045      .000      .000   1594.50   9700.00
   .012231      705.      750.      705.         6         0         0       .00    352.30  10052.30


*SECNO 1.425
3280 CROSS SECTION      1.43 EXTENDED       .22 FEET
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3470 ENCROACHMENT STATIONS=     9697.5    9938.8  TYPE=      1  TARGET=      241.300
     1.425      2.02   1605.82       .00   1604.73   1605.75       .23      7.84       .00   1604.30
    1250.0     984.4     265.6        .0     264.5      64.2        .0      50.0      36.4 100000.00
       .47      3.72      4.14       .00      .049      .045      .000      .000   1603.50   9697.50
   .009827     700.      760.      715.         4         0         0       .00    241.30   9938.80


*SECNO 1.355

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   06MAY93      11:30:45                                                                                PAGE   25


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


3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9649.2   10018.8  TYPE=      1  TARGET=      369.600
     1.555      3.02   1612.82       .00   1612.01   1613.11       .29      7.34       .02   1611.70
    1250.0     675.1     326.3     248.6     207.4      55.2      58.4      54.9      40.8   1611.80
       .52      3.25      5.91      4.25      .049      .045      .049      .000   1609.80   9649.20
   .012708     640.      705.      685.         4         0         0       .00    347.53  10018.80


*SECNO 1.719

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


3470 ENCROACHMENT STATIONS=     9943.0   10050.0  TYPE=      1  TARGET=      107.000
     1.719      2.54   1621.94       .00   1621.15   1622.10       .17      8.98       .01   1621.00
    419.0      55.8     136.9     226.3      21.0      33.5      79.3      59.1      44.9   1620.70
       .59      2.65      4.09      2.85      .049      .045      .049      .000   1619.40   9943.00
   .007285     750.      850.      875.         3         0         0       .00    107.00  10050.00


*SECNO 1.831

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9914.2    9945.4  TYPE=      1  TARGET=       31.200
        ET APPLIED AT SEC. 1.8314, 1.9935 AND 2.1231 TO PREVENT INEFFECTIVE FLOW
        TO RIGHT OF RIDGE ON RIGHT.
     1.831      2.84   1627.84       .00   1627.75   1628.52       .68      6.27       .15   1626.90
    415.0        .0     415.0        .0        .0      63.3        .0      60.4      45.8 100000.00
       .61       .00      6.62       .00      .000      .045      .000      .000   1625.00   9914.20
   .016817     550.      590.      605.         3         0         0       .00     31.20   9945.40


*SECNO 1.993

3470 ENCROACHMENT STATIONS=    10093.0   10120.0  TYPE=      1  TARGET=       27.000

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


     1.993     3.64   1637.94       .00   1637.34   1639.57       .63     10.04       .01   1636.40
     419.0      7.5     410.8        .4       2.9      64.0        .4      61.3      46.3   1635.90
       .64     2.80      6.42      1.02      .049      .045      .049      .000   1634.30  10093.00
   .010909     750.      750.      750.         4         0         0       .00     27.00  10120.00


*SECNO 2.123

3470 ENCROACHMENT STATIONS=     9873.4    9958.2  TYPE=      1  TARGET=       84.800
     2.123     3.20   1648.40       .00   1647.74   1648.80       .40     10.20       .02   1645.00
     407.0       .0     368.2      38.8        .0      69.6      20.8      63.2      47.5   1648.00
       .70      .00      5.29      1.86      .000      .045      .049      .000   1645.20   9873.40
   .011095     850.      935.      800.         5         0         0       .00     84.80   9958.20


*SECNO 2.254

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9963.0   10050.0  TYPE=      1  TARGET=      117.000
        ET APPLIED AT SEC. 2.2538 AND 2.2812 TO PREVENT INEFFECTIVE FLOW TO
        LEFT OF RIDGE ON LEFT.
     2.254     2.67   1656.57       .00   1656.32   1656.85       .28      8.04       .01   1656.40
     401.0      2.6      93.9     304.5       2.2      20.5      73.0      64.6      49.0   1656.20
       .74     1.16      4.58      4.17      .049      .045      .049      .000   1653.90   9963.38
   .012614     675.      685.      675.         4         0         0       .00    108.46  10080.00


*SECNO 2.281

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    10015.7   10190.0  TYPE=      1  TARGET=      174.300
     2.281     1.89   1658.09       .00   1658.03   1658.24       .16      1.38       .01   1656.60
     401.0       .0     145.2     255.8        .0      41.6      85.7      65.0      49.3   1656.70
       .75      .00      3.49      2.98      .000      .045      .049      .000   1656.20  10015.70
   .006591     100.      145.      160.         2         0         0       .00    101.31  10190.00


DCHV=     .300 DEHV=     .500

   06MAY93      11:30:45                                                                          PAGE   27


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


*SECNO 2.287
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1662.40 ELREA=      1662.40
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      BEGIN SUN VALLEY PARKWAY CULVERTS 8-10'X4'R.C.BOXES (STRUC.#6) AND
      2-10'X7' R.C.BOXES (STRUC.#7) MODELED AS COMBINED BRIDGE IN HEC2.
    2.267      .91   1658.61   1658.61   1658.61   1659.07      .46      .28      .15   1661.70
    401.0       .0     401.0       .0        .0      73.8       .0     65.1     49.4   1661.70
      .76      .00      5.43      .00      .000      .030     .000     .000  1657.70   9959.50
  .014014      30.       30.       30.        20        11        0      .00    81.00  10040.50


SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1658.44 , NOT    1658.61 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP      BAREA      BS       ELCHU     ELCHD
     .95      1.65      2.63       .00    81.00      6.00    300.00      .00   1658.40   1657.70

*SECNO 2.313

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.17

CLASS B LOW FLOW

3420 BRIDGE W.S.=    1659.01 BRIDGE VELOCITY=       5.55     CALCULATED CHANNEL AREA=        46.

 EGPRS      EGLWC       H3      QWEIR      QLOW      BAREA   TRAPEZOID      ELLC     ELTRD     WEIRLN
                                                             AREA
      .00   1659.89      .00        0.      401.      300.      300.     1662.40   1661.50        0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1662.40 ELREA=      1662.40

      END SUN VALLEY PARKWAY CULVERTS
    2.313      1.24   1659.64      .00   1659.64   1659.89      .25      .82      .00   1662.40
    401.0       .0     401.0       .0        .0     100.7       .0     65.4     49.7   1662.40
      .77      .00      3.98      .00      .000      .012     .000     .000  1658.40   9959.50
 .000805      140.      140.      140.         0         0        0      .00    81.00  10040.50


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  06MAY93      11:30:45                                                                          PAGE   28


   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TW4       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO 2.321

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.321      1.02   1660.52   1660.52   1660.52   1660.88      .35      .08      .05   1660.00
    401.0       1.2     301.4      98.3        .5      61.0      23.0     65.5     49.8   1660.00
      .77      2.35      4.94      4.28      .030      .030      .030     .000  1659.50   9959.00
  .014024       40.       40.       40.        20        15         0      .00   123.40  10240.76


CCHV=     .100 CEHV=     .300
*SECNO -1.555
START TRIB COMP
    -1.555     1.555  1612.621
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3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9649.2   10018.6  TYPE=      1  TARGET=      369.600
        REPEAT CROSS-SECTION FOR START OF WASH #2 TRIBUTARY
    -1.555      3.02   1612.82       .00   1612.01   1613.11       .29       .00       .00   1611.70
    1250.0     675.3     326.2     248.5     207.6      55.3      58.5      68.6      53.3   1611.80
       .91      3.25      5.90      4.25      .049      .045      .049      .000   1609.80   9649.20
   .012674      640.      705.      685.         0         0         0       .00    347.77  10018.80


*SECNO 11.711
3280 CROSS SECTION     11.71 EXTENDED       .50 FEET


3470 ENCROACHMENT STATIONS=    10805.9   10920.0  TYPE=      1  TARGET=      114.140
        ADD 10 TO CROSS-SECTION I.D. FOR TRIBUTARY. STATION 10870 =TRIB BASELINE
    11.711      2.50   1622.00       .00   1621.32   1622.26       .26      9.16       .00   1620.30
     859.0     672.6     186.4        .0     165.7      42.6        .0      73.9      58.0 100000.00
       .87      4.06      4.37       .00      .049      .045      .000      .000   1619.50  10805.86
   .008292      900.      850.      700.         5         0         0       .00    114.14  10920.00


*SECNO 11.855
1
   06MAY93      11:30:45                                                                                    PAGE   29


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


3280 CROSS SECTION     11.85 EXTENDED       .50 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    11391.1   11491.6  TYPE=      1  TARGET=      100.540
        ADD 10 TO SECTION I.D. FOR TRIBUTARY. STATION 11475 =TRIB. BASELINE.
    11.855      3.40   1631.40   1631.40   1630.52   1632.06       .66      8.57       .12   1629.90
     859.0     317.1     541.9        .0      76.2      71.5        .0      76.9      59.8 100000.00
       .90      4.16      7.58       .00      .049      .045      .000      .000   1628.00  11391.06
   .016936      725.      775.      775.         5        11         0       .00    100.54  11491.60


*SECNO 11.967
3280 CROSS SECTION     11.97 EXTENDED       .22 FEET


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


3470 ENCROACHMENT STATIONS=    12032.0   12078.2  TYPE=      1  TARGET=       46.200
        ADD 10 TO SECTION I.D. FOR TRIBUTARY.  STATION 12065 =TRIB. BASELINE.
        ET APPLIED TO PREVENT INEFFECTIVE FLOW TO RIGHT OF RIDGE ON RIGHT.
    11.967      4.22   1637.92       .00   1637.25   1638.44       .52      6.36       .01   1634.90
     859.0        .0     859.0        .0        .0     149.1        .0      78.7      60.8 100000.00
       .93       .00      5.76       .00      .000      .045      .000      .000   1633.70  12032.00
   .007444      615.      585.      550.         5         0         0       .00     46.20  12078.20


CONV=     .000 DENV=     .500
*SECNO 11.975
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7183 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3499 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1641.80 ELREA=      1641.80

        ADD 10 TO SECTION I.D. FOR TRIBUTARY.  DEBIN SUN VALLEY PARKWAY CULVERTS
    11.973      1.77   1638.17   1638.17   1638.17   1637.06       .89       .37       .19   1640.00
     859.0        .0     859.0        .0        .0     113.6        .0      79.0      60.9   1640.00
       .53       .00      7.56       .00      .000      .030      .000      .000   1636.40   9968.00
   .011660       40.       40.       40.         3        14         0       .00     64.00  10032.00


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   04MAY93      11:30:45                                                                                    PAGE   30


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


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     CDFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     3         .012      .20      2.70       .00      4.00     12.00    145.00     12         3      1637.80   1636.40

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 12.002

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1640.719  EGOC =   1640.765  PCWSE=   1638.175  ELTRD=   1641.000


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.45

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
  1640.72   1640.77      1.70        0.      859.     5.307     240.0   1641.00        0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1640.50 ELREA=      1641.00

        ADD 10 TO SECT. I.D.  END PARKWAY CULVERTS (5-12'X4' R.C.B.'S STRUC.#11)
    12.002      2.53   1640.33       .00   1640.33   1640.77       .44      1.70       .00   1641.00
     859.0        .0     859.0        .0        .0     161.9        .0      79.5      61.1   1641.00
       .94       .00      5.31       .00      .000      .012      .000      .000   1637.80   9968.00
   .000590      145.      145.      145.         3         0         0       .00     64.00  10032.00


*SECNO 12.013
3685 30 TRIALS ATTEMPTED WSEL,CWSEL
3670 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      9930.0   10048.0  TYPE=       1  TARGET=      118.000
        ET APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE OF WEIR LEVEES ON LEFT\RT.
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFFECTIVE FLOW LIMITS IS POSSIBLE AND DETENTION REQUIRED
        PRESERVATION UPSTREAM OF ROAD.
    12.013      1.73   1640.53   1640.53   1640.53   1641.14       .61       .10       .08   1640.50
```

859.0	.0	859.0	.0	.0	137.6	.0	79.7	61.2	100000.00
.94	.00	6.24	.00	.000	.030	.000	.000	1638.80	9930.00
.012748	60.	60.	60.	20	19	0	.00	116.44	10046.44

THIS RUN EXECUTED 06MAY93 11:33:00

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

 Version   4.6.0;  February 1991
**********************************
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH NO. 2 100- YEAR P

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	ESTA	ENDST
	.107	1293.00	1536.50	.00	4.97	.00	9918.30	9954.90	9469.70	10030.40	9480.10	10027.94
	.107	1293.00	1537.50	.00	6.05	.00	9918.30	9954.90	9918.30	9995.61	9918.30	9995.61
*	.220	1293.00	1541.60	1541.53	6.16	600.00	10020.00	10048.20	.00	.00	9606.02	10196.77
	.220	1293.00	1542.50	.00	7.24	600.00	10020.00	10048.20	9986.00	10081.00	9986.00	10081.00
	.352	1293.00	1548.69	.00	4.31	675.00	10055.20	10084.10	9708.40	10507.20	9760.59	10486.50
	.352	1293.00	1549.44	.00	5.44	675.00	10055.20	10084.10	10055.20	10188.10	10055.20	10188.10
	.481	1293.00	1555.16	1555.02	4.63	740.00	10015.90	10033.20	.00	.00	9570.40	10671.46
	.481	1293.00	1556.20	.00	5.96	740.00	10015.90	10033.20	9990.00	10200.00	9990.00	10200.00
	.611	1293.00	1561.51	.00	2.77	700.00	10033.00	10066.80	.00	.00	9743.00	10775.14
	.611	1293.00	1562.37	.00	4.14	700.00	10033.00	10066.80	10000.00	10250.00	10000.00	10250.00
	.738	1293.00	1567.37	.00	4.73	675.00	10007.50	10022.80	.00	.00	9678.97	10760.93
	.738	1293.00	1568.17	.00	5.76	675.00	10007.50	10022.80	10007.50	10237.10	10007.50	10237.10
	.873	1293.00	1574.16	.00	2.85	730.00	10027.80	10037.30	9450.00	10270.70	9536.36	10259.90
	.873	1293.00	1574.98	.00	4.17	730.00	10027.80	10037.30	9884.60	10217.20	9884.60	10217.20
	1.013	1273.00	1581.26	.00	2.86	735.00	9979.70	10032.70	9238.00	10173.90	9246.91	10082.07
	1.013	1273.00	1582.03	.00	4.39	735.00	9979.70	10032.70	9796.70	10032.70	9796.70	10032.70
	1.151	1273.00	1588.94	.00	2.24	750.00	9941.60	9976.70	.00	.00	9346.23	10051.49
	1.151	1273.00	1589.87	.00	3.84	750.00	9941.60	9976.70	9700.00	9976.70	9700.00	9976.70
	1.288	1273.00	1596.96	.00	3.69	750.00	10000.10	10052.30	.00	.00	9366.52	10051.95
	1.288	1273.00	1597.66	.00	5.06	750.00	10000.10	10052.30	9700.00	10052.30	9700.00	10052.30
	1.425	1250.00	1604.73	.00	2.46	760.00	9894.70	9938.80	.00	.00	9377.16	10146.38
	1.425	1250.00	1605.52	.00	4.19	760.00	9894.70	9938.80	9697.50	9935.80	9697.50	9938.80

	SECNO	Q	CWSEL	DIFWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	BETA	ENDST
	1.555	1250.00	1612.01	.00	4.23	705.00	9949.20	9976.60	.00	.00	9418.45	10255.26
	1.555	1250.00	1612.82	.00	5.91	705.00	9949.20	9976.60	9649.20	10018.80	9649.20	10018.80
*	1.719	419.00	1621.15	.00	2.71	850.00	9962.30	9981.20	.00	.00	9753.75	10270.98
*	1.719	419.00	1621.94	.00	4.09	850.00	9962.30	9981.20	9943.00	10050.00	9943.00	10050.00
*	1.831	419.00	1627.75	1627.75	4.89	590.00	9914.20	9945.70	9649.50	10141.50	9860.78	10111.35
*	1.831	419.00	1627.84	.00	6.62	590.00	9914.20	9945.70	9914.20	9945.40	9914.20	9945.40
*	1.993	419.00	1637.34	1637.34	6.57	750.00	10094.80	10119.80	9619.00	10188.90	10050.03	10122.72
	1.993	419.00	1637.94	.00	6.42	750.00	10094.80	10119.80	10093.00	10120.00	10093.00	10120.00
	2.123	407.00	1647.74	.00	3.59	935.00	9873.40	9908.90	9799.10	10115.90	9844.77	10061.93
	2.123	407.00	1648.40	.00	5.29	935.00	9873.40	9908.90	9873.40	9958.20	9873.40	9958.20
*	2.254	401.00	1656.32	1656.32	5.63	685.00	9975.10	9989.20	9890.50	10256.20	9966.87	10080.31
	2.254	401.00	1656.57	.00	4.58	685.00	9975.10	9989.20	9963.00	10080.00	9963.58	10080.00
*	2.281	401.00	1658.03	.00	2.89	145.00	10015.70	10042.30	9900.40	10241.90	9973.67	10194.87
	2.281	401.00	1658.09	.00	3.49	145.00	10015.70	10042.30	10015.70	10190.00	10015.70	10190.00
*	2.287	401.00	1658.61	1658.61	5.45	30.00	9959.50	10040.50	.00	.00	9959.50	10040.50
*	2.287	401.00	1658.61	1658.61	5.43	30.00	9959.50	10040.50	.00	.00	9959.50	10040.50
*	2.313	401.00	1659.64	.00	3.98	140.00	9959.50	10040.50	.00	.00	9959.50	10040.50
*	2.313	401.00	1659.64	.00	3.98	140.00	9959.50	10040.50	.00	.00	9959.50	10040.50
*	2.321	401.00	1660.52	1660.52	4.94	40.00	9961.00	10040.00	.00	.00	9959.00	10240.76
*	2.321	401.00	1660.52	1660.52	4.94	40.00	9961.00	10040.00	.00	.00	9959.00	10240.76
	-1.555	1250.00	1612.01	.00	4.23	705.00	9949.20	9976.60	.00	.00	9418.30	10255.26
	-1.555	1250.00	1612.82	.00	5.90	705.00	9949.20	9976.60	9649.20	10018.80	9649.20	10018.80
	11.711	859.00	1621.32	.00	3.66	850.00	10897.80	10920.00	.00	.00	10567.84	11085.71
	11.711	859.00	1622.00	.00	4.37	850.00	10897.80	10920.00	10805.86	10920.00	10805.86	10920.00
	11.855	859.00	1630.52	1630.49	6.22	775.00	11463.70	11491.60	.00	.00	11172.64	11593.68
*	11.855	859.00	1631.40	1631.40	7.58	775.00	11463.70	11491.60	11391.06	11491.60	11391.06	11491.60
*	11.967	859.00	1637.25	.00	5.53	585.00	12032.00	12078.20	11895.40	12109.40	11998.43	12093.35
*	11.967	859.00	1637.92	.00	5.76	585.00	12032.00	12078.20	12032.00	12078.20	12032.00	12078.20
*	11.975	859.00	1638.17	1638.17	7.59	40.00	9968.00	10032.00	.00	.00	9968.00	10032.00
*	11.975	859.00	1638.17	1638.17	7.56	40.00	9968.00	10032.00	.00	.00	9968.00	10032.00
*	12.002	859.00	1640.33	.00	5.31	145.00	9968.00	10032.00	.00	.00	9968.00	10032.00
*	12.002	859.00	1640.33	.00	5.31	145.00	9968.00	10032.00	.00	.00	9968.00	10032.00
*	12.013	859.00	1640.53	1640.53	6.24	60.00	9930.00	10048.00	9930.00	10048.00	9930.00	10046.44
*	12.013	859.00	1640.53	1640.53	6.24	60.00	9930.00	10048.00	9930.00	10048.00	9930.00	10046.44

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WASH NO. 2 100- YEAR P

SUMMARY PRINTOUT

	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	.107	508.59	302.46	281.95	1.89	4.97	2.97	1538.30	1536.50	.00	547.84	1531.10	1.67
	.107	.00	802.86	460.14	.00	6.05	4.41	1538.30	1537.50	.00	77.31	1531.10	1.07

*	.220	287.07	358.46	647.47	2.63	6.16	4.22	1541.90	1541.60	5.10	422.94	1538.60	1.29
	.220	332.37	403.19	354.44	5.13	7.24	5.17	1542.90	1542.50	5.00	95.00	1538.60	1.09
	.352	139.17	233.49	920.34	1.76	4.31	2.64	1549.60	1548.69	7.09	648.04	1545.10	1.20
	.352	.00	413.23	879.77	.00	5.44	4.32	1549.60	1549.44	6.95	132.90	1545.10	1.04
	.481	225.71	117.63	949.65	1.86	4.63	2.56	1555.70	1555.16	6.47	1028.92	1552.10	1.18
	.481	146.13	253.14	893.72	3.99	5.96	3.93	1555.90	1556.20	6.76	210.00	1552.10	1.09
	.611	149.28	57.97	1055.74	1.67	2.77	2.42	1562.20	1561.51	6.34	915.41	1559.20	1.05
	.611	164.28	253.27	875.45	3.34	4.14	3.41	1562.60	1562.37	6.17	250.00	1559.20	1.02
	.738	474.12	125.67	693.20	3.36	4.73	2.12	1571.00	1567.37	5.86	887.10	1565.20	1.28
	.738	.00	223.04	1069.95	.00	5.76	3.79	1571.00	1568.17	5.79	229.60	1565.20	1.09
	.873	1185.79	25.10	82.11	2.93	2.85	1.81	1574.20	1574.16	6.78	620.51	1572.00	1.04
	.873	841.00	69.14	382.86	3.77	4.17	2.70	1574.20	1574.98	6.81	331.38	1572.00	1.07
	1.013	1146.79	83.86	42.35	3.04	2.86	2.38	1582.00	1581.26	7.11	782.76	1578.50	1.01
	1.013	965.83	307.17	.00	4.11	4.39	.00	1582.00	1582.03	7.06	236.00	1578.50	1.00
	1.151	1234.66	32.57	5.77	3.22	2.24	1.91	1590.20	1588.94	7.68	494.00	1587.10	1.01
	1.151	1096.30	176.70	.00	3.77	3.84	.00	1590.20	1589.87	7.84	276.70	1587.10	1.00
	1.288	1086.17	186.83	.00	3.16	3.69	.00	1598.10	1596.96	8.02	574.19	1594.50	1.01
	1.288	836.10	436.90	.00	3.28	5.06	.00	1598.50	1597.66	7.79	352.30	1594.50	1.14
	1.425	778.69	72.84	398.47	2.44	2.46	2.58	1604.90	1604.73	7.77	749.22	1603.50	1.00
	1.425	984.43	265.57	.00	3.72	4.14	.00	1605.30	1605.52	7.86	241.30	1603.50	1.01
	1.555	555.80	139.45	554.75	3.06	4.23	2.91	1612.50	1612.01	7.28	607.44	1609.80	1.04
	1.555	675.10	326.35	248.55	3.33	5.91	4.25	1613.00	1612.82	7.30	347.53	1609.80	1.22
*	1.719	124.16	49.92	244.93	1.70	2.71	2.25	1621.90	1621.15	9.14	362.90	1619.40	1.07
*	1.719	55.79	136.94	226.27	2.65	4.09	2.85	1622.40	1621.94	9.11	107.00	1619.40	1.10
*	1.831	24.02	295.24	99.74	1.51	4.89	1.75	1630.00	1627.75	6.60	227.82	1625.00	1.79
*	1.831	.00	419.00	.00	.00	6.62	.00	1630.00	1627.84	5.91	31.20	1625.00	1.00
*	1.993	91.52	321.41	6.07	3.13	6.57	2.90	1644.20	1637.34	9.59	72.69	1634.30	1.30
	1.993	7.76	410.83	.41	2.80	6.42	1.02	1644.20	1637.94	10.10	27.00	1634.30	1.04
	2.123	21.05	165.80	220.15	1.74	3.59	2.96	1651.30	1647.74	10.40	154.83	1645.20	1.08
	2.123	.00	368.23	38.77	.00	5.29	1.86	1651.30	1648.40	10.46	84.80	1645.20	1.27

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	DWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	2.254	.00	95.48	305.52	.05	5.63	5.51	1661.20	1656.32	8.58	78.24	1653.90	1.00
	2.254	2.59	93.93	304.48	1.16	4.58	4.17	1661.20	1656.57	8.17	108.46	1653.90	1.03
*	2.281	88.04	115.94	197.01	2.16	2.89	2.37	1662.00	1658.03	1.71	147.50	1656.20	1.04
	2.281	.00	145.17	255.83	.00	3.49	2.98	1662.00	1658.09	1.52	101.31	1656.20	1.02
*	2.287	.00	401.00	.00	.00	5.45	.00	1660.00	1658.61	.58	81.00	1657.70	1.00
*	2.287	.00	401.00	.00	.00	5.43	.00	1660.00	1658.61	.53	81.00	1657.70	1.00
*	2.313	.00	401.00	.00	.00	3.98	.00	1662.40	1659.64	1.03	81.00	1658.40	1.00
*	2.313	.00	401.00	.00	.00	3.98	.00	1662.40	1659.64	1.03	81.00	1658.40	1.00
*	2.321	1.23	301.42	98.35	2.39	4.94	4.25	1663.00	1660.52	.89	123.40	1659.50	1.02
	2.321	1.23	301.42	98.35	2.35	4.94	4.13	1663.00	1660.52	.88	123.40	1659.50	1.02

	-1.555	555.90	139.42	354.77	3.06	4.23	2.90	1612.50	1612.01	-46.52	367.66	1609.80	1.06
	-1.555	675.32	326.18	248.50	3.25	5.90	4.25	1613.00	1612.82	-47.70	347.77	1609.80	1.22
	11.711	564.43	101.07	193.29	2.70	3.66	2.18	1621.50	1621.32	9.32	466.15	1619.50	1.07
	11.711	672.60	186.40	.00	4.06	4.37	.00	1621.50	1622.00	9.19	114.14	1619.50	1.00
	11.855	327.85	292.08	239.04	3.97	6.22	3.60	1630.90	1630.52	9.20	264.30	1628.00	1.19
*	11.855	317.09	541.91	.00	4.16	7.58	.00	1630.90	1631.40	9.40	100.54	1628.00	1.26
*	11.967	164.00	654.01	40.99	3.62	5.53	2.95	1637.70	1637.25	6.73	94.92	1633.70	1.12
*	11.967	.00	859.00	.00	.00	5.76	.00	1637.70	1637.92	6.52	46.20	1633.70	1.00
*	11.975	.00	859.00	.00	.00	7.59	.00	1638.50	1638.17	.92	64.00	1636.40	1.00
*	11.975	.00	859.00	.00	.00	7.56	.00	1638.50	1638.17	.25	64.00	1636.40	1.00
*	12.002	.00	859.00	.00	.00	5.31	.00	1641.00	1640.33	2.16	64.00	1637.80	1.00
*	12.002	.00	859.00	.00	.00	5.31	.00	1641.00	1640.33	2.15	64.00	1637.80	1.00
*	12.013	.00	859.00	.00	.00	6.24	.00	1641.00	1640.53	.20	116.44	1638.80	1.00
*	12.013	.00	859.00	.00	.00	6.24	.00	1641.00	1640.53	.20	116.44	1638.80	1.00

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WASH NO. 2 100- YEAR P

SUMMARY PRINTOUT

	BEGNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	.107	.00	.00	1536.70	.20	.00	.00	59.59	.00	5.40	49.00	45.00	49.00
	.107	.00	.00	1537.97	.47	.00	.00	63.97	.00	6.40	.00	45.00	49.00
*	.220	600.00	12.50	1541.93	.33	5.19	.04	136.45	5.40	3.00	49.00	45.00	49.00
	.220	600.00	12.50	1543.09	.60	5.08	.04	116.65	3.19	3.90	49.00	45.00	49.00
	.352	675.00	9.63	1548.83	.13	6.88	.02	76.41	11.75	3.59	49.00	45.00	49.00
	.352	675.00	9.63	1549.79	.34	6.67	.03	82.36	7.09	4.34	.00	45.00	49.00
	.481	740.00	9.46	1555.28	.11	6.45	.00	111.79	19.79	3.06	49.00	45.00	49.00
	.481	740.00	9.46	1556.50	.30	6.71	.00	109.71	11.84	4.10	49.00	45.00	49.00
	.611	700.00	10.14	1561.59	.09	6.31	.00	78.22	28.19	2.31	49.00	45.00	49.00
	.611	700.00	10.14	1562.57	.20	6.05	.01	73.13	17.11	3.17	49.00	45.00	49.00
	.738	675.00	8.89	1567.51	.14	5.90	.01	99.32	36.31	2.17	49.00	45.00	49.00
	.738	675.00	8.89	1568.44	.27	5.85	.02	105.51	22.41	2.97	.00	45.00	49.00
	.873	730.00	9.32	1574.28	.13	6.78	.00	89.16	44.20	2.16	49.00	45.00	49.00
	.873	730.00	9.32	1575.17	.19	6.72	.01	82.96	28.22	2.98	49.00	45.00	49.00
	1.013	735.00	8.84	1581.40	.14	7.12	.00	119.59	51.24	2.76	49.00	45.00	49.00
	1.013	735.00	8.84	1582.31	.27	7.11	.02	127.06	33.76	3.53	49.00	45.00	.00
	1.151	750.00	11.47	1589.10	.16	7.69	.01	103.23	57.80	1.84	49.00	45.00	49.00
	1.151	750.00	11.47	1590.09	.22	7.78	.00	97.74	38.92	2.77	49.00	45.00	.00
	1.288	750.00	9.87	1597.13	.16	8.03	.00	124.78	64.27	2.46	49.00	45.00	.00
	1.288	750.00	9.87	1597.90	.25	7.80	.01	122.31	44.47	3.16	49.00	45.00	.00
	1.425	760.00	11.84	1604.83	.10	7.69	.01	95.14	71.56	1.23	49.00	45.00	49.00
	1.425	760.00	11.84	1605.75	.23	7.84	.00	98.27	49.96	2.02	49.00	45.00	.00

	1.555	705.00	8.94	1612.16	.15	7.32	.02	129.85	78.40	2.21	49.00	45.00	49.00
	1.555	705.00	8.94	1613.11	.29	7.34	.02	127.05	54.35	3.02	49.00	45.00	49.00
*	1.719	850.00	11.29	1621.22	.07	9.05	.01	71.22	84.17	1.75	49.00	45.00	49.00
*	1.719	850.00	11.29	1622.10	.17	8.98	.01	72.85	59.07	2.54	49.00	45.00	49.00
*	1.831	590.00	9.49	1628.03	.27	4.80	.06	94.26	86.42	2.75	49.00	45.00	49.00
*	1.831	590.00	9.49	1628.52	.68	6.27	.15	168.17	60.41	2.84	.00	45.00	.00
*	1.993	750.00	12.40	1637.89	.55	9.14	.08	163.79	88.25	3.04	49.00	45.00	49.00
	1.993	750.00	12.40	1638.57	.63	10.04	.01	109.09	61.53	3.64	49.00	45.00	49.00
	2.123	935.00	11.66	1647.90	.16	9.97	.04	81.36	90.38	2.54	49.00	45.00	49.00
	2.123	935.00	11.66	1648.90	.40	10.20	.02	110.95	63.18	3.20	.00	45.00	49.00

	SECNO	XLCH	K&CHSL	ES	HV	HL	OLOSS	10*KS	VOL	DEPTH	K&XNL	K&XNCH	K&XNR
*	2.254	685.00	12.70	1656.79	.48	8.76	.10	238.02	91.93	2.42	49.00	45.00	49.00
	2.254	685.00	12.70	1656.85	.28	8.04	.01	126.14	64.64	2.67	49.00	45.00	49.00
*	2.281	145.00	15.86	1658.13	.10	1.29	.04	44.39	92.37	1.83	49.00	45.00	49.00
	2.281	145.00	15.86	1658.24	.16	1.38	.01	65.91	65.03	1.89	.00	45.00	49.00
*	2.287	30.00	50.00	1659.07	.46	.22	.18	141.39	92.45	.91	.00	30.00	.00
*	2.287	30.00	50.00	1659.07	.46	.28	.15	140.14	65.10	.91	.00	30.00	.00
*	2.313	140.00	5.00	1659.89	.25	.82	.00	8.05	92.73	1.24	.00	12.00	.00
*	2.313	140.00	5.00	1659.89	.25	.82	.00	8.05	65.38	1.24	.00	12.00	.00
*	2.321	40.00	27.50	1660.88	.35	.08	.05	140.24	92.92	1.02	30.00	30.00	30.00
*	2.321	40.00	27.50	1660.88	.35	.08	.05	140.24	65.47	1.02	30.00	30.00	30.00
	-1.555	705.00	.00	1612.16	.15	.00	.00	129.52	96.60	2.21	49.00	45.00	49.00
	-1.555	705.00	.00	1613.11	.29	.00	.00	126.74	68.58	3.02	49.00	45.00	49.00
	11.711	850.00	11.41	1621.44	.12	9.28	.00	92.42	103.47	1.82	49.00	45.00	49.00
	11.711	850.00	11.41	1622.26	.26	9.16	.00	82.92	73.86	2.50	49.00	45.00	.00
	11.835	775.00	10.97	1630.88	.35	9.36	.07	179.44	107.94	2.52	49.00	45.00	49.00
*	11.835	775.00	10.97	1632.06	.66	8.57	.12	167.36	76.89	3.40	49.00	45.00	.00
*	11.967	595.00	9.74	1637.66	.41	6.77	.02	80.35	110.46	3.55	49.00	45.00	49.00
*	11.967	595.00	9.74	1638.44	.52	6.36	.01	74.44	78.91	4.22	.00	45.00	.00
*	11.975	40.00	67.50	1639.06	.69	.39	.24	117.73	110.59	1.77	.00	30.00	.00
*	11.975	40.00	67.50	1639.06	.69	.37	.19	116.60	79.03	1.77	.00	30.00	.00
*	12.002	145.00	9.66	1640.77	.44	1.70	.00	5.90	111.05	2.53	.00	12.00	.00
*	12.002	145.00	9.66	1640.77	.44	1.70	.00	5.90	79.49	2.53	.00	12.00	.00
*	12.013	60.00	16.67	1641.14	.61	.10	.08	127.48	111.26	1.73	.00	30.00	.00
*	12.013	60.00	16.67	1641.14	.61	.10	.08	127.48	79.69	1.73	.00	30.00	.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .220  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.719  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.719  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.831  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.831  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     1.831  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.993  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.993  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     2.254  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.254  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     2.291  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     2.287  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.287  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.287  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     2.287  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.287  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.287  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     2.313  PROFILE=  1  HYDRAULIC JUMP D.S.
WARNING SECNO=     2.313  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     2.313  PROFILE=  2  HYDRAULIC JUMP D.S.
WARNING SECNO=     2.313  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     2.321  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.321  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.321  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     2.321  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.321  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.321  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    11.855  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    11.855  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    11.967  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    11.967  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    11.975  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    11.975  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    11.975  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=    11.975  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    11.975  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    12.002  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    12.002  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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CAUTION SECNO=    12.013  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    12.013  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    12.013  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=    12.013  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    12.013  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    12.013  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

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FLOODWAY DATA WASH NO. 2 100- YEAR P
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.107	77.	242.	5.3	1537.5	1536.5	1.0
.220	95.	217.	6.0	1542.5	1541.6	.9
.352	133.	279.	4.6	1549.4	1548.7	.7
.481	210.	306.	4.2	1556.2	1555.2	1.0
.611	250.	367.	3.5	1562.4	1561.5	.9
.738	230.	321.	4.0	1568.2	1567.4	.8
.873	333.	381.	3.4	1575.0	1574.2	.8
1.013	236.	305.	4.2	1582.1	1581.3	.8
1.151	277.	337.	3.8	1589.8	1588.9	.9
1.288	352.	341.	3.7	1597.7	1597.0	.7
1.425	241.	339.	3.8	1605.5	1604.7	.8
1.555	370.	321.	3.9	1612.8	1612.0	.8
1.719	107.	134.	3.1	1621.9	1621.1	.8
1.831	31.	63.	6.6	1627.9	1627.8	.1
1.993	27.	67.	6.2	1637.9	1637.3	.6
2.123	85.	90.	4.5	1648.4	1647.7	.7
2.254	116.	96.	4.2	1656.6	1656.3	.3
2.281	174.	127.	3.1	1658.1	1658.0	.1
2.297	91.	74.	5.4	1658.6	1658.6	.0
2.313	81.	101.	4.0	1659.6	1659.6	.0
2.321	282.	85.	4.7	1660.5	1660.5	.0
-1.555	370.	321.	3.9	1612.8	1612.0	.8
11.711	114.	205.	4.1	1622.0	1621.3	.7
11.855	101.	148.	5.8	1631.4	1630.5	.9
11.967	46.	145.	5.8	1638.0	1637.3	.7
11.975	64.	114.	7.6	1638.2	1638.2	.0
12.002	64.	162.	5.3	1640.3	1640.3	.0
12.013	116.	138.	6.2	1640.5	1640.5	.0

```
1*****************************************
*  HEC-2 WATER SURFACE PROFILES          *
*                                        *
*  Version   4.6.0;  February 1991       *
*                                        *
*  RUN DATE    06MAY93    TIME   11:36:34 *
*****************************************
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*************************************
*  U.S. ARMY CORPS OF ENGINEERS     *
*  HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D       *
*  DAVIS, CALIFORNIA 95616-4687     *
*         (916) 756-1104            *
*************************************
```

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

1

06MAY93 11:36:34 PAGE 1

THIS RUN EXECUTED 06MAY93 11:36:34

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

 Version   4.6.0;  February 1991
***********************************
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```
T1      SUN VALLEY PARKWAY NORTH FIS    CONTRACT:FCDMC NO. 90-04   FILE:WASH3-4
T2      100-YEAR WATER SURFACE PROFILE                  A-N WEST INC. PHX. AZ.
T3      WASH NO. 3  100-YEAR PROFILE                DATE:5\16\91;REV:8\15\91

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC    HVINS     Q        WSEL     FQ

      0        2                        .0086                                 1511

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC     IBW      CHNIM    ITRACE

     1                 -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38        43        1        2       26       39       21       22       27       28
    53        54        0       38       13       14       15       55       26       56
    63         1       51        4       42       57        0       38       39       33
     3        10       11       12        5        7        8       16       17       18
     0       200

NC    .049      .049      .042       .1        .3
QT      2       766       766
ET              7.1       9.1                                   9775.2    10317.8     9952.6     9980.0
        FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
        MODEL WITH EQUAL CONVEYANCE REDUCTION (METHOD 4)
```

```
        MODEL WITH EDDIE CONVEYANCE REDUCTION METHOD-IV
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH NO.1
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED
X1    .0862       51    9952.6    9980.0         0         0         0
GR   1516.7    9775.2    1516.3    9798.6    1516.1    9820.9    1515.8    9849.0    1514.3    9868.7
GR   1512.1    9889.9    1511.6    9899.8    1510.8    9917.5    1511.2    9927.8    1510.7    9936.6
GR   1511.4    9944.8    1510.6    9952.6    1507.5    9961.4    1507.2    9971.5    1510.9    9980.0
GR   1512.5    9989.7    1513.1   10000.0    1513.1   10000.1    1513.8   10009.6    1514.1   10027.2
GR   1514.6   10046.2    1514.1   10063.5    1513.5   10085.5    1513.5   10105.7    1512.8   10135.2
GR   1512.9   10174.9    1512.2   10214.7    1512.6   10259.6    1512.9   10291.2    1513.4   10317.8
GR   1513.5   10347.3    1512.9   10380.3    1512.4   10424.9    1511.4   10452.5    1509.7   10485.0
1
   06MAY93      11:36:34                                                                          PAGE    2


GR   1509.4   10495.4    1509.9   10498.2    1509.6   10510.9    1509.8   10516.4    1508.4   10521.5
GR   1510.0   10524.6    1510.0   10549.4    1510.3   10571.2    1510.7   10592.4    1510.9   10626.0
GR   1511.2   10656.4    1511.1   10681.1    1512.1   10728.0    1512.6   10750.8    1512.5   10782.4
GR   1513.3   10798.6

ET              7.1       9.1                                   9808.3   10226.6    9904.1    9925.6
X1    .2093       88    9904.1    9925.6       650       650       675
GR   1521.2    9553.2    1520.5    9566.6    1519.2    9585.5    1517.4    9606.3    1516.7    9620.7
GR   1516.4    9639.4    1516.1    9657.9    1516.3    9672.8    1515.9    9693.2    1515.9    9700.9
GR   1516.3    9710.1    1515.4    9718.6    1515.4    9724.9    1516.0    9731.6    1514.6    9739.3
GR   1515.8    9743.1    1515.6    9751.5    1515.8    9758.5    1516.6    9763.4    1516.4    9771.8
GR   1516.9    9779.8    1517.2    9793.8    1518.6    9808.3    1518.5    9825.5    1518.0    9841.6
GR   1517.6    9849.5    1518.2    9859.2    1517.7    9867.8    1517.3    9871.4    1518.2    9877.2
GR   1518.7    9882.2    1518.2    9889.2    1517.8    9895.0    1516.7    9899.9    1516.1    9904.1
GR   1512.2    9909.0    1512.2    9915.4    1516.1    9925.6    1516.6    9932.2    1516.3    9939.0
GR   1516.7    9954.2    1516.2    9967.9    1515.9    9973.5    1515.8    9978.7    1516.3    9984.8
GR   1516.0    9990.4    1514.8    9996.2    1516.0    9999.3    1516.4   10000.0    1516.4   10000.1
GR   1515.0   10005.8    1516.0   10012.8    1515.9   10024.5    1516.4   10035.8    1516.9   10050.8
GR   1517.1   10063.1    1517.9   10082.8    1519.2   10106.9    1519.2   10121.0    1519.9   10137.0
GR   1520.1   10157.6    1520.2   10180.1    1520.8   10203.1    1521.3   10222.8    1521.2   10226.6
GR   1521.0   10238.8    1520.6   10260.2    1520.7   10288.9    1520.1   10327.4    1519.5   10342.4
GR   1519.9   10366.3    1519.9   10381.0    1518.9   10408.0    1519.4   10419.6    1518.1   10423.7
GR   1519.7   10426.5    1519.5   10450.1    1519.5   10485.1    1519.8   10505.2    1520.0   10527.1
GR   1519.6   10544.5    1520.4   10553.0    1520.2   10572.9    1520.6   10593.7    1521.3   10609.1
GR   1521.2   10632.8    1521.5   10652.9    1521.7   10659.5

NC     .049      .049      .045
ET              7.1       9.1                                   9660.6   10181.2      9971     10049
X1    .3551       89    9984.2   10008.7       775       800       800
GR   1529.0    9660.6    1529.4    9674.6    1529.4    9698.4    1528.8    9719.2    1528.9    9737.1
GR   1528.6    9758.5    1528.8    9782.9    1528.8    9804.6    1527.4    9822.6    1526.8    9842.0
GR   1525.1    9860.9    1524.7    9884.7    1524.5    9912.9    1523.8    9937.3    1523.0    9944.6
GR   1523.5    9948.8    1523.2    9956.1    1522.9    9962.2    1521.8    9967.9    1523.4    9971.5
GR   1523.5    9978.2    1523.2    9984.2    1521.0    9992.7    1519.7    9997.1    1522.4   10000.0
GR   1522.4   10000.1    1523.8   10008.7    1523.8   10015.1    1523.0   10022.5    1520.6   10031.2
GR   1520.7   10035.1    1523.2   10037.8    1523.4   10045.4    1523.6   10060.2    1523.1   10074.4
GR   1522.8   10084.2    1521.0   10090.4    1523.1   10094.3    1523.4   10102.6    1522.9   10115.6
GR   1523.3   10129.3    1523.8   10142.7    1524.5   10158.0    1525.9   10181.2    1525.8   10200.7
GR   1525.8   10211.8    1525.5   10229.8    1525.0   10249.1    1524.9   10262.6    1525.2   10272.4
GR   1524.7   10284.2    1524.2   10302.2    1523.2   10320.4    1523.2   10345.6    1523.6   10354.9
GR   1522.8   10361.9    1522.0   10366.9    1520.6   10368.8    1523.1   10372.1    1523.5   10383.1
GR   1523.5   10392.0    1523.6   10402.2    1522.8   10415.8    1523.4   10419.0    1522.1   10427.5
GR   1523.2   10431.2    1523.4   10439.9    1523.6   10444.2    1523.4   10458.3    1522.9   10469.2
GR   1523.3   10487.2    1523.1   10501.0    1523.1   10515.0    1523.4   10539.2    1523.8   10564.8
GR   1524.5   10590.3    1524.9   10621.1    1525.9   10635.8    1526.0   10676.6    1526.1   10719.0
GR   1526.0   10780.4    1526.2   10816.2    1526.0   10881.1    1526.5   10927.2    1527.7   10964.3
GR   1527.4   10988.3    1527.0   11025.9    1527.8   11045.1    1528.1   11050.6

ET              7.1       9.1                                   9736.4   10398.2    9889.8   10050.81
```

X1	.4991	70	9989.9	10018.9	790	770	790			
GR	1536.6	9736.4	1536.5	9757.6	1535.3	9784.5	1534.6	9809.3	1534.5	9831.1
GR	1534.6	9855.8	1533.7	9882.4	1533.8	9900.4	1534.7	9911.0	1533.8	9929.8
GR	1533.4	9943.1	1533.0	9955.3	1532.5	9969.3	1532.6	9983.5	1532.0	9989.9
GR	1531.3	9995.8	1529.8	10000.0	1529.8	10000.1	1528.8	10010.8	1532.5	10018.9

1

GR	1532.5	10030.7	1532.4	10049.0	1532.2	10076.7	1532.2	10091.9	1531.2	10103.4
GR	1531.8	10113.1	1531.9	10119.4	1531.0	10124.1	1531.9	10126.4	1531.8	10140.8
GR	1531.9	10157.9	1531.8	10174.2	1531.8	10195.6	1532.1	10217.5	1532.9	10240.5
GR	1532.7	10264.2	1533.2	10283.9	1532.7	10294.3	1533.0	10311.5	1533.1	10330.8
GR	1533.1	10346.1	1532.6	10359.7	1533.1	10367.3	1532.9	10378.1	1533.6	10387.1
GR	1534.2	10398.2	1533.9	10411.6	1534.1	10419.7	1534.2	10432.2	1533.9	10446.4
GR	1533.4	10457.3	1533.2	10470.5	1531.4	10482.1	1532.9	10486.2	1531.9	10489.5
GR	1532.5	10491.1	1532.8	10499.2	1533.2	10510.4	1533.5	10528.1	1533.5	10542.3
GR	1533.6	10557.8	1534.0	10570.2	1534.2	10582.9	1534.7	10604.3	1534.6	10618.6
GR	1535.3	10635.3	1535.7	10650.1	1535.9	10672.1	1536.4	10683.7	1535.8	10698.8
QT	2	649	649							
ET		7.1	9.1				9880.8	10325.9	9987.2	10065.6
X1	.6449	95	9987.2	10014.1	780	750	760			
GR	1542.5	9657.5	1542.1	9679.3	1542.5	9693.7	1542.1	9712.6	1542.1	9728.3
GR	1540.5	9738.3	1540.5	9743.7	1541.2	9748.9	1540.9	9760.8	1541.0	9775.6
GR	1540.8	9797.6	1540.5	9809.4	1541.3	9818.7	1541.0	9831.0	1538.9	9840.4
GR	1540.0	9847.1	1540.7	9870.2	1541.0	9880.8	1540.9	9896.6	1540.4	9906.2
GR	1540.1	9923.5	1538.4	9933.3	1540.4	9939.2	1540.1	9955.8	1540.1	9969.4
GR	1539.5	9981.0	1540.3	9987.2	1539.7	9997.2	1538.5	10000.0	1538.5	10000.1
GR	1538.1	10006.2	1538.6	10010.1	1540.4	10014.1	1540.5	10026.1	1540.4	10034.6
GR	1540.2	10049.8	1540.1	10064.8	1540.2	10076.8	1540.7	10084.5	1539.9	10097.9
GR	1540.5	10111.9	1540.6	10133.8	1539.8	10150.5	1540.5	10172.6	1540.8	10198.9
GR	1540.8	10208.8	1540.8	10225.0	1540.9	10238.9	1541.0	10249.5	1541.0	10270.9
GR	1541.6	10287.0	1542.0	10305.4	1543.1	10325.9	1542.6	10348.5	1542.7	10372.2
GR	1542.1	10398.0	1543.2	10420.3	1541.9	10431.8	1541.7	10436.3	1542.4	10446.3
GR	1542.0	10460.5	1541.9	10470.9	1542.0	10485.7	1542.2	10499.3	1542.4	10517.4
GR	1542.7	10544.1	1542.5	10572.6	1542.1	10590.7	1541.6	10604.9	1540.9	10624.4
GR	1540.6	10641.2	1540.4	10655.6	1540.8	10668.8	1540.2	10688.2	1540.4	10715.0
GR	1540.1	10732.2	1539.9	10757.4	1540.2	10757.9	1540.5	10758.0	1540.9	10790.7
GR	1540.8	10801.5	1540.2	10811.2	1540.3	10822.0	1540.5	10828.4	1540.7	10837.7
GR	1539.9	10846.2	1540.7	10848.9	1540.4	10857.6	1540.5	10861.1	1540.6	10869.7
GR	1540.6	10877.6	1541.1	10887.5	1541.9	10900.8	1542.1	10915.7	1542.4	10927.2
ET		7.1	9.1				9915.1	10490.3	10000.1	10047.5
X1	.7898	90	10000.1	10021.3	770	740	760			
GR	1552.1	9590.6	1549.1	9735.5	1548.8	9750.5	1549.3	9760.3	1548.7	9772.8
GR	1548.8	9793.2	1548.5	9808.2	1549.1	9818.3	1546.1	9824.3	1548.1	9830.2
GR	1548.7	9835.7	1547.2	9842.6	1548.6	9846.6	1548.4	9854.1	1548.3	9862.0
GR	1547.8	9873.6	1548.5	9879.6	1548.9	9889.8	1549.8	9901.2	1550.4	9906.2
GR	1550.8	9915.1	1550.8	9923.5	1550.7	9931.5	1550.5	9940.9	1550.6	9951.1
GR	1549.7	9957.7	1548.2	9966.9	1549.1	9972.7	1549.1	9980.4	1549.7	9990.7
GR	1550.2	9996.9	1549.7	10000.0	1549.7	10000.1	1548.0	10006.7	1547.5	10010.5
GR	1547.5	10015.5	1549.4	10021.3	1549.7	10026.4	1548.7	10031.5	1548.5	10036.5
GR	1547.8	10042.6	1549.2	10046.4	1549.2	10054.8	1549.1	10061.7	1548.5	10067.1
GR	1549.1	10072.0	1549.3	10081.1	1549.3	10091.2	1549.1	10103.7	1547.9	10112.3
GR	1549.4	10117.7	1549.0	10124.4	1549.0	10137.0	1549.9	10151.1	1550.5	10167.2
GR	1550.4	10189.2	1551.2	10205.2	1551.4	10219.9	1551.8	10237.1	1552.1	10257.1
GR	1551.8	10372.1	1550.4	10376.2	1551.2	10380.1	1550.9	10390.8	1551.8	10401.0
GR	1552.3	10490.3	1552.1	10519.6	1552.0	10551.5	1551.6	10570.8	1551.2	10591.7
GR	1551.1	10614.4	1550.7	10642.0	1550.5	10656.7	1550.2	10673.3	1549.9	10690.3
GR	1548.9	10814.4	1548.4	10845.9	1548.8	10852.2	1548.7	10862.8	1548.1	10876.5
GR	1548.2	10894.3	1548.3	10913.5	1548.2	10930.9	1548.6	10935.8	1547.8	10945.2
GR	1548.4	10954.6	1548.9	10967.8	1548.6	10981.0	1549.0	11005.0	1549.9	11183.4

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ET		7.1	9.1				9725.7	10157.8	9906.5	9969.0
X1	.9384	70	9906.5	9953.6	770	770	785			
GR	1560.4	9725.7	1559.5	9761.9	1558.7	9778.5	1558.9	9786.7	1558.4	9796.5
GR	1558.1	9806.1	1557.4	9814.2	1556.6	9819.9	1557.8	9823.2	1558.2	9827.9
GR	1558.2	9835.7	1558.2	9841.4	1558.4	9849.9	1558.1	9856.0	1559.1	9862.9
GR	1558.2	9868.1	1558.5	9876.9	1558.4	9884.7	1557.6	9889.6	1556.5	9893.8
GR	1558.2	9898.2	1558.6	9902.0	1558.3	9906.5	1556.3	9909.4	1556.1	9915.6
GR	1557.6	9919.4	1557.5	9926.0	1557.5	9933.6	1557.2	9938.5	1556.2	9942.3
GR	1556.1	9946.3	1556.8	9948.5	1557.6	9953.6	1557.7	9962.5	1557.6	9972.2
GR	1557.7	9983.3	1557.8	9992.1	1558.2	9998.2	1557.9	10000.0	1557.9	10000.1
GR	1558.2	10040.6	1557.8	10048.1	1557.8	10060.4	1557.4	10066.1	1557.9	10074.2
GR	1557.8	10131.8	1558.4	10138.2	1558.1	10146.7	1558.2	10152.9	1559.1	10157.8
GR	1558.8	10162.9	1558.4	10170.0	1558.9	10176.5	1558.8	10191.1	1558.7	10199.6
GR	1558.2	10266.0	1558.7	10277.9	1558.6	10296.9	1559.0	10310.3	1559.1	10324.3
GR	1559.2	10338.8	1559.2	10351.5	1559.0	10363.0	1559.4	10374.5	1559.4	10385.5
GR	1559.0	10454.2	1559.3	10462.1	1559.2	10471.9	1559.4	10492.0	1559.6	10501.0

ET		7.1	9.1				9702.7	10112.5	9987.4	10022.9
X1	1.0843	90	9987.4	10012.3	790	760	790			
GR	1570.0	9702.7	1569.0	9722.4	1568.2	9748.6	1567.0	9776.9	1566.4	9802.2
GR	1566.6	9817.8	1566.2	9830.1	1566.5	9835.6	1566.5	9847.8	1566.0	9863.4
GR	1566.2	9884.7	1565.7	9910.9	1565.3	9937.2	1565.5	9948.1	1566.0	9952.9
GR	1565.8	9962.8	1565.3	9970.6	1565.2	9977.7	1565.1	9987.4	1563.8	9991.8
GR	1564.4	9996.8	1563.7	10000.0	1563.7	10000.1	1563.6	10008.5	1565.9	10012.3
GR	1565.4	10018.1	1564.9	10022.6	1565.7	10028.2	1565.8	10041.1	1565.9	10049.1
GR	1567.0	10059.0	1567.0	10069.9	1567.7	10087.2	1568.3	10100.5	1568.6	10112.5
GR	1568.0	10124.8	1567.7	10139.8	1567.7	10148.9	1567.7	10160.9	1566.6	10180.2
GR	1566.6	10197.5	1566.8	10210.6	1566.3	10221.8	1565.8	10232.8	1565.9	10244.0
GR	1565.9	10250.8	1565.1	10260.5	1565.4	10264.0	1565.2	10272.3	1566.0	10282.2
GR	1565.7	10295.0	1565.8	10308.8	1565.7	10324.7	1566.0	10346.4	1566.3	10358.4
GR	1565.6	10371.6	1565.6	10391.1	1565.8	10409.3	1565.8	10428.5	1565.5	10440.9
GR	1565.8	10447.8	1565.5	10457.2	1565.9	10462.5	1565.8	10469.3	1565.9	10483.2
GR	1565.9	10495.0	1565.4	10503.2	1566.1	10512.1	1566.0	10534.2	1566.8	10566.1
GR	1567.1	10584.1	1567.0	10596.0	1566.1	10609.9	1565.7	10620.3	1566.8	10626.1
GR	1565.9	10633.0	1566.3	10641.3	1566.1	10646.0	1566.1	10652.7	1566.6	10662.0
GR	1567.2	10678.7	1567.3	10695.4	1567.6	10707.5	1567.9	10721.0	1567.7	10731.5
GR	1568.1	10757.4	1568.6	10783.0	1569.1	10813.7	1569.8	10852.4	1570.3	10857.8

QT	2	532	532							
ET		7.1	9.1				9910.6	10307.4	9940.0	10000.0
X1	1.2206	49	9975.1	9998.8	720	710	725			
GR	1579.1	9607.2	1579.1	9621.3	1578.7	9640.8	1578.6	9656.6	1577.3	9683.9
GR	1576.1	9706.9	1574.6	9741.0	1574.5	9761.6	1573.2	9780.9	1573.0	9793.4
GR	1572.8	9804.2	1571.5	9812.8	1572.9	9814.8	1573.0	9828.2	1572.8	9840.0
GR	1573.4	9863.7	1573.6	9886.4	1574.4	9910.6	1574.2	9922.0	1573.3	9936.1
GR	1573.5	9943.8	1573.5	9953.2	1572.6	9960.0	1573.3	9964.3	1573.9	9975.1
GR	1573.3	9982.0	1571.6	9986.3	1571.9	9995.0	1573.6	9998.8	1573.1	10000.0
GR	1573.1	10000.1	1573.9	10005.4	1573.7	10015.4	1573.2	10021.2	1573.1	10025.4
GR	1573.6	10028.5	1573.4	10038.0	1573.3	10058.8	1573.2	10075.5	1573.4	10093.8
GR	1573.4	10110.7	1574.2	10137.9	1574.6	10163.4	1575.0	10177.4	1575.4	10197.1
GR	1575.4	10223.0	1575.9	10250.8	1576.7	10282.2	1577.7	10307.4		

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ET		7.1	9.1				9855.6	10271.1	9971.1	10010.3
X1	1.3475	76	9988.0	10010.3	690	690	690			
GR	1586.7	9270.2	1586.6	9303.8	1586.4	9342.2	1586.0	9376.1	1585.8	9408.4
GR	1585.8	9456.6	1585.3	9476.4	1584.6	9490.4	1583.5	9502.2	1583.0	9520.1
GR	1582.6	9530.5	1581.8	9539.7	1581.7	9554.4	1581.3	9571.6	1580.8	9584.9
GR	1579.5	9591.9	1580.8	9596.1	1581.7	9603.5	1581.0	9617.3	1580.5	9625.9
GR	1579.9	9630.0	1580.4	9632.4	1580.8	9639.3	1581.7	9647.2	1581.5	9661.9
GR	1581.6	9670.3	1581.4	9681.3	1581.7	9690.5	1581.3	9700.7	1581.2	9718.1

GR	1581.9	9723.6	1581.8	9733.7	1581.9	9754.0	1581.8	9767.2	1582.1	9783.9
GR	1582.0	9799.9	1582.0	9817.6	1582.4	9837.5	1582.3	9855.6	1582.1	9872.5
GR	1581.6	9900.0	1581.6	9915.8	1581.0	9936.5	1580.1	9948.6	1581.7	9963.4
GR	1580.8	9971.7	1580.8	9979.9	1580.3	9988.0	1578.6	9995.2	1578.3	10000.0
GR	1578.3	10000.1	1580.0	10005.5	1580.9	10010.3	1580.4	10017.8	1581.2	10023.1
GR	1580.1	10031.1	1580.6	10033.2	1580.1	10040.3	1580.8	10045.1	1580.4	10053.3
GR	1580.7	10065.3	1581.4	10074.4	1580.8	10082.3	1580.4	10092.2	1580.4	10103.3
GR	1580.3	10116.6	1581.8	10132.3	1582.1	10149.0	1582.2	10161.6	1582.2	10180.8
GR	1582.9	10200.6	1584.2	10213.7	1584.8	10229.0	1585.1	10240.1	1585.7	10254.3
GR	1585.6	10271.1								
ET		7.1	9.1				9578.7	10445.2	10060.0	10110.0
X1	1.4839	95	10063.3	10104.7	770	750	790			
GR	1592.2	9321.8	1592.1	9334.0	1591.4	9340.5	1591.0	9355.2	1591.4	9360.1
GR	1589.9	9440.1	1590.4	9444.9	1590.0	9450.2	1589.6	9454.2	1590.4	9456.3
GR	1591.5	9485.0	1591.4	9490.5	1591.1	9499.1	1590.9	9504.8	1591.1	9509.5
GR	1591.9	9513.3	1591.6	9519.2	1592.0	9524.5	1591.6	9530.3	1591.2	9535.7
GR	1591.4	9569.9	1591.5	9575.4	1592.1	9578.7	1591.8	9583.8	1591.7	9591.5
GR	1591.5	9663.3	1591.4	9671.1	1591.6	9680.4	1591.7	9685.3	1590.9	9685.4
GR	1590.9	9717.4	1591.4	9731.0	1591.0	9741.4	1591.3	9747.4	1590.9	9760.0
GR	1590.5	9774.9	1590.5	9790.9	1591.1	9805.8	1590.4	9819.8	1590.4	9833.5
GR	1590.5	9898.6	1590.0	9914.4	1590.3	9924.6	1590.2	9935.6	1590.4	9949.0
GR	1590.2	9963.9	1589.9	9973.9	1590.0	9985.6	1589.4	9993.6	1589.0	10000.0
GR	1588.4	10031.2	1588.7	10037.8	1588.5	10044.8	1588.3	10051.0	1587.7	10058.6
GR	1587.3	10063.3	1585.9	10069.0	1586.9	10071.3	1587.5	10076.1	1587.7	10082.8
GR	1587.5	10089.1	1586.7	10093.2	1586.1	10097.0	1585.9	10102.1	1587.0	10104.7
GR	1587.8	10108.6	1588.5	10114.6	1588.8	10120.9	1588.8	10129.0	1588.5	10137.4
GR	1588.4	10146.4	1587.8	10155.1	1587.8	10161.7	1587.7	10168.9	1586.7	10174.2
GR	1587.3	10178.1	1587.5	10187.2	1587.5	10196.6	1587.9	10207.7	1587.9	10221.6
GR	1589.1	10273.1	1589.6	10281.7	1589.9	10295.0	1590.2	10302.9	1590.8	10314.7
GR	1591.3	10324.7	1591.1	10334.4	1590.9	10343.8	1590.8	10354.6	1590.3	10361.2
GR	1590.3	10402.9	1590.9	10409.6	1590.8	10419.4	1591.2	10430.9	1592.0	10445.2
ET		7.1	9.1				9895.3	10585.0	9963.7	10004.6
X1	1.6222	95	9963.7	9979.9	735	800	760			
GR	1601.9	9568.3	1600.1	9645.9	1599.3	9660.4	1599.1	9677.0	1598.5	9691.5
GR	1598.8	9702.1	1598.1	9709.8	1597.5	9715.4	1598.4	9719.4	1598.9	9725.0
GR	1599.0	9732.9	1598.5	9739.5	1599.1	9748.0	1599.5	9754.6	1599.2	9761.2
GR	1599.3	9796.3	1599.4	9799.4	1598.9	9804.5	1599.1	9812.9	1598.9	9823.9
GR	1599.3	9889.2	1599.6	9895.3	1599.2	9901.5	1598.8	9910.9	1598.7	9925.6
GR	1598.0	9934.6	1598.1	9944.1	1598.0	9950.9	1597.9	9956.1	1596.4	9963.7
GR	1595.0	9966.8	1594.9	9971.8	1595.8	9975.1	1596.2	9979.9	1597.0	9986.5
GR	1597.6	9996.0	1597.4	10000.0	1597.4	10000.1	1597.1	10004.7	1597.3	10012.8
GR	1597.0	10019.0	1597.3	10027.2	1597.3	10034.9	1597.9	10041.3	1597.8	10047.6
GR	1598.0	10055.5	1597.8	10063.6	1597.4	10074.0	1598.1	10080.3	1597.8	10087.5

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GR	1598.0	10126.2	1598.2	10130.6	1597.4	10138.6	1597.5	10149.8	1597.3	10170.8
GR	1597.3	10185.7	1597.6	10195.3	1597.8	10204.0	1597.8	10210.8	1597.0	10217.4
GR	1596.4	10223.4	1597.3	10226.5	1597.2	10232.1	1597.5	10240.7	1598.1	10248.6
GR	1597.8	10257.0	1597.5	10264.5	1597.7	10271.0	1597.8	10275.2	1597.9	10282.5
GR	1598.1	10289.9	1598.2	10293.9	1596.1	10297.9	1597.8	10300.8	1598.2	10304.4
GR	1599.2	10334.9	1599.7	10340.7	1599.9	10348.3	1599.7	10354.4	1599.9	10360.4
GR	1600.3	10423.8	1600.3	10434.8	1599.8	10445.9	1599.3	10454.8	1599.6	10465.5
GR	1599.8	10474.0	1599.6	10481.8	1599.4	10489.7	1599.6	10500.0	1599.7	10509.8
GR	1600.9	10555.4	1600.9	10562.7	1600.8	10570.6	1601.3	10574.6	1601.4	10585.0
ET			9.1						9961.4	10100
	THIS SECTION IS DOWNSTREAM COMMON SECTION FOR TRIBUTARYS TO STRUC.#14\15									
X1	1.768	95	9961.4	9980.4	790	770	820			
GR	1610.5	9810.6	1610.2	9815.2	1610.1	9821.8	1609.6	9830.4	1609.1	9837.7
GR	1608.5	9844.6	1608.1	9854.2	1607.5	9863.9	1607.3	9871.2	1607.2	9879.7
GR	1606.5	9888.2	1606.5	9894.6	1606.9	9900.0	1606.4	9907.3	1605.5	9913.3
GR	1606.1	9921.4	1605.0	9927.6	1605.5	9930.6	1605.9	9935.1	1606.3	9942.0

GR	1606.3	9947.4	1605.8	9953.5	1605.4	9961.4	1605.0	9968.1	1604.1	9972.4
GR	1603.4	9977.4	1605.3	9980.4	1605.2	9987.5	1605.3	9995.8	1605.7	10000.0
GR	1605.7	10000.1	1606.0	10004.9	1606.0	10012.2	1606.5	10019.9	1606.2	10026.9
GR	1606.5	10036.5	1606.6	10042.2	1606.4	10050.9	1606.1	10060.1	1606.3	10067.3
GR	1606.4	10072.2	1606.5	10076.1	1605.5	10080.8	1605.2	10085.5	1605.3	10094.1
GR	1605.5	10102.5	1605.3	10110.0	1604.3	10113.5	1603.8	10117.3	1604.0	10121.9
GR	1605.4	10126.1	1606.4	10131.0	1606.5	10137.2	1606.5	10145.8	1606.6	10153.4
GR	1606.1	10162.3	1605.7	10168.4	1605.8	10175.7	1605.9	10183.0	1605.7	10189.2
GR	1605.8	10228.1	1605.8	10234.4	1605.5	10239.6	1604.9	10244.9	1604.6	10248.3
GR	1604.5	10253.1	1605.4	10256.0	1604.7	10261.0	1605.2	10266.0	1606.3	10271.1
GR	1606.8	10342.7	1606.7	10353.8	1606.4	10366.5	1606.5	10380.0	1606.6	10388.1
GR	1607.1	10447.1	1607.3	10457.9	1607.5	10463.2	1607.3	10471.7	1607.5	10479.9
GR	1607.0	10486.3	1607.0	10495.1	1607.2	10503.7	1607.2	10508.4	1607.4	10515.7
GR	1606.4	10521.3	1607.5	10524.8	1607.4	10533.1	1607.4	10542.9	1607.5	10559.0
GR	1608.0	10649.5	1607.7	10659.7	1608.2	10662.2	1608.3	10675.2	1608.7	10685.3
QT	2	86	86							
ET		7.1	9.1				9811.2	10153.6	10074.9	10083.7
X1	1.8883	75	10074.9	10083.7	615	615	615			
GR	1617.8	9811.2	1616.7	9859.9	1616.8	9869.6	1616.4	9879.8	1615.9	9889.5
GR	1615.6	9965.0	1615.6	9969.7	1615.5	9973.1	1615.7	9976.6	1615.1	9981.5
GR	1614.1	10000.0	1614.1	10000.1	1614.2	10003.2	1614.4	10007.3	1614.5	10011.0
GR	1613.1	10042.8	1612.6	10048.0	1613.8	10052.0	1614.3	10056.5	1613.8	10061.2
GR	1613.6	10066.0	1613.3	10071.2	1613.0	10074.9	1612.1	10078.1	1611.9	10081.5
GR	1613.6	10083.7	1614.5	10087.1	1613.9	10091.0	1613.5	10095.2	1613.4	10100.6
GR	1613.3	10102.2	1612.9	10102.3	1614.1	10110.1	1614.7	10115.8	1614.4	10122.5
GR	1614.2	10127.8	1614.9	10135.6	1614.4	10142.2	1614.6	10148.1	1615.2	10153.6
GR	1615.0	10160.0	1614.8	10168.3	1614.6	10178.6	1614.3	10189.1	1613.8	10196.7
GR	1613.9	10204.3	1613.4	10213.1	1612.4	10219.0	1611.7	10222.5	1611.9	10227.1
GR	1613.5	10230.6	1613.9	10236.3	1613.5	10241.2	1613.5	10245.9	1613.8	10253.1
GR	1614.0	10258.4	1614.1	10262.4	1613.7	10267.3	1613.2	10273.1	1612.8	10278.5
GR	1612.8	10283.4	1613.2	10288.0	1612.9	10291.9	1612.0	10295.9	1612.8	10300.2
GR	1613.1	10306.5	1613.1	10313.3	1612.8	10321.5	1612.9	10329.6	1612.4	10337.4
GR	1612.8	10341.1	1612.9	10347.3	1613.4	10354.5	1613.6	10360.7	1614.0	10365.5

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ET		7.1	9.1				9800.1	10017.4	9970.5	9983.1
X1	2.0067	95	9970.5	9983.1	650	660	690			
GR	1623.7	9800.1	1623.6	9805.1	1623.3	9809.8	1623.5	9817.1	1623.3	9822.4
GR	1623.0	9857.0	1622.7	9864.9	1622.4	9875.3	1621.9	9883.2	1621.9	9890.6
GR	1621.9	9896.1	1622.1	9900.8	1621.3	9904.0	1620.7	9906.4	1621.2	9907.9
GR	1621.7	9910.3	1621.7	9914.6	1622.0	9920.7	1621.6	9925.9	1621.4	9930.1
GR	1621.5	9932.9	1622.4	9935.5	1621.4	9938.7	1620.8	9941.2	1621.4	9944.8
GR	1622.0	9948.6	1621.7	9954.6	1622.1	9958.1	1622.2	9961.7	1621.8	9966.8
GR	1621.3	9970.5	1620.8	9974.6	1620.7	9980.2	1621.7	9983.1	1622.6	9987.4
GR	1622.8	10012.0	1623.3	10017.4	1623.1	10023.2	1623.0	10030.1	1623.0	10035.9
GR	1623.2	10042.3	1622.8	10049.0	1622.7	10055.1	1622.8	10060.4	1622.4	10068.8
GR	1621.8	10113.9	1621.8	10119.1	1622.3	10125.0	1622.6	10128.0	1621.8	10131.5
GR	1622.2	10159.8	1622.5	10164.1	1622.6	10167.3	1622.5	10171.4	1622.4	10176.5
GR	1622.2	10182.1	1621.8	10187.2	1621.8	10191.4	1621.7	10196.9	1621.6	10202.9
GR	1620.7	10228.9	1620.5	10234.9	1620.5	10240.2	1620.2	10245.7	1620.1	10250.2
GR	1619.4	10253.5	1620.4	10255.0	1620.3	10259.4	1620.5	10263.0	1620.4	10267.2
GR	1619.9	10270.2	1619.2	10272.9	1618.8	10276.0	1620.3	10278.6	1621.1	10282.3
GR	1621.8	10286.8	1622.0	10290.7	1622.0	10294.9	1621.7	10298.3	1621.4	10303.3
GR	1621.9	10306.6	1622.2	10310.3	1621.6	10315.2	1621.6	10320.2	1621.7	10325.0
GR	1621.8	10330.2	1621.6	10336.1	1621.2	10341.8	1621.4	10345.6	1621.5	10349.2
GR	1622.1	10352.5	1622.3	10355.7	1622.1	10359.5	1621.7	10363.1	1622.1	10367.6
ET		7.1	9.1				9894.0	10046.9	9952.7	9962.7
X1	2.0758	95	9952.4	9962.7	385	380	380			
GR	1628.1	9894.0	1628.1	9899.2	1627.5	9908.9	1627.2	9915.3	1626.9	9922.9
GR	1626.6	9928.6	1625.4	9934.8	1626.6	9937.8	1626.4	9945.4	1626.7	9952.4
GR	1625.9	9954.8	1624.9	9958.1	1626.0	9962.7	1627.1	9967.9	1626.6	9973.3

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GR   1626.8    9992.1    1627.1   10000.0    1627.1   10000.1    1627.2   10012.1    1626.6   10020.4
GR   1626.9   10027.4    1625.8   10034.5    1627.7   10039.5    1627.4   10043.0    1627.1   10046.9
GR   1626.7   10090.7    1626.2   10100.6    1626.5   10107.9    1626.8   10116.0    1627.1   10123.0
GR   1626.5   10167.7    1626.7   10171.4    1626.8   10176.5    1627.1   10181.1    1626.4   10186.8
GR   1626.3   10255.5    1625.8   10262.8    1625.6   10269.4    1626.0   10272.4    1625.7   10278.9
GR   1625.6   10284.8    1625.6   10289.9    1625.7   10295.9    1625.9   10302.2    1626.4   10307.4
GR   1626.3   10312.9    1626.1   10319.9    1626.1   10325.6    1625.1   10336.5    1624.4   10339.1
GR   1625.1   10341.9    1624.9   10346.2    1624.8   10350.3    1624.7   10352.9    1625.0   10356.6
GR   1624.9   10360.6    1625.0   10364.4    1624.8   10369.7    1624.5   10372.6    1624.5   10375.8
GR   1624.5   10377.7    1625.0   10380.3    1625.4   10383.5    1626.1   10386.7    1626.5   10388.5
GR   1625.9   10392.0    1625.6   10394.7    1625.6   10398.0    1625.7   10402.0    1625.4   10404.8
GR   1625.2   10408.2    1625.4   10411.8    1625.3   10414.8    1625.7   10418.1    1625.5   10422.3
GR   1625.3   10426.6    1624.5   10430.9    1624.1   10434.8    1624.0   10437.0    1625.1   10440.5
GR   1625.2   10445.8    1625.0   10451.5    1624.8   10457.6    1625.1   10461.8    1625.5   10469.1
GR   1626.0   10502.7    1626.1   10507.4    1626.3   10513.6    1626.4   10523.1    1626.3   10530.6
GR   1626.3   10535.5    1626.6   10541.7    1626.6   10553.2    1626.9   10565.1    1627.0   10580.0

ET                          9.1                                                     10003.5   10019.5
X1   2.1279       55   10003.5   10019.5       280       .275       290
GR   1634.9    9688.7    1634.6    9704.2    1634.4    9720.1    1634.1    9735.0    1633.1    9762.3
GR   1632.6    9779.5    1632.3    9795.8    1632.2    9807.8    1631.9    9814.2    1631.5    9819.9
GR   1631.4    9823.7    1631.7    9826.7    1632.6    9831.8    1632.1    9836.6    1631.7    9846.7
GR   1631.6    9858.7    1631.2    9878.2    1631.3    9889.5    1630.9    9899.6    1630.7    9904.4
GR   1631.0    9911.0    1630.9    9920.3    1630.8    9927.7    1631.2    9933.0    1630.8    9937.8
GR   1631.3    9947.0    1630.8    9952.4    1631.4    9957.1    1630.9    9962.8    1630.8    9972.0
GR   1630.9    9980.5    1630.8    9989.5    1630.7    9995.7    1630.1   10000.0    1630.1   10000.1
1
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GR   1630.1   10003.5    1628.8   10006.1    1629.1   10009.7    1629.6   10013.8    1630.3   10019.5
GR   1630.7   10025.5    1630.4   10031.9    1630.7   10043.1    1630.7   10063.2    1630.9   10085.3
GR   1631.2   10104.5    1631.2   10123.7    1631.0   10144.4    1631.1   10162.5    1631.0   10174.5
GR   1631.2   10186.0    1631.5   10195.7    1632.1   10204.5    1632.7   10212.1    1633.1   10221.6

NC      .03       .03       .03        .3        .5
        BEGIN SUN VALLEY PARKWAY CULVERTS (4-10'X4' CULVERTS- STRUC.#13)
X1   2.1421         4    9978.5   10021.5        75        75        75
X3       10                                                          1635      1635
GR     1635    9978.5      1630    9978.5      1630   10021.5      1635   10021.5

NC     .012      .012      .012
SC    4.012        .2       2.7         0         4        10       154      12.3    1631.0      1630
        END CULVERTS
X1   2.1712         4    9978.5   10021.5       154       154       154
X2                          2    1635.0    1635.0
X3       10                                                        1635.0    1635.0
BT        8     10000    1637.9              10001    1637.4               10041    1636.6
BT    10049    1636.2              10067    1636.0                10068    1635.0              10152
BT   1635.0              10177    1636.0
GR   1635.0    9978.5    1631.0    9978.5    1631.0   10021.5    1635.0   10021.5

NC      .03       .03       .03
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
        UPSTREAM OF ROAD.
X1   2.1863         4      9972     10030        80        80        80
GR     1634      9972      1633      9982      1633     10021      1635     10030

NC     .049      .049      .045        .1        .3
QT        2       532       532
ET                          9.1                                                      9961.4     10100
        REPEAT THIS SECTION FOR START OF TRIBUTARY TO STRUC. #14.
X1   -1.768        95    9961.4    9980.4       790       770       820
GR   1610.5    9810.6    1610.2    9815.2    1610.1    9821.8    1609.6    9830.4    1609.1    9837.7
GR   1608.5    9844.6    1608.1    9854.2    1607.5    9863.9    1607.3    9871.2    1607.2    9879.7
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GR   1606.5    9888.2   1606.5    9894.6   1606.9    9900.0   1606.4    9907.3   1605.5    9913.3
GR   1606.1    9921.4   1605.0    9927.6   1605.5    9930.6   1605.9    9935.1   1606.3    9942.0
GR   1606.3    9947.4   1605.8    9953.5   1605.4    9961.4   1605.0    9968.1   1604.1    9972.4
GR   1603.4    9977.4   1605.3    9980.4   1605.2    9987.5   1605.3    9995.8   1605.7   10000.0
GR   1605.7   10000.1   1606.0   10004.9   1606.0   10012.2   1606.5   10019.9   1606.2   10026.9
GR   1606.5   10036.5   1606.6   10042.2   1606.4   10050.9   1606.1   10060.1   1606.3   10067.3
GR   1606.4   10072.2   1606.5   10076.1   1605.5   10080.8   1605.2   10085.5   1605.3   10094.1
GR   1605.5   10102.5   1605.3   10110.0   1604.3   10113.5   1603.8   10117.3   1604.0   10121.9
GR   1605.4   10126.1   1606.4   10131.0   1606.5   10137.2   1606.5   10145.8   1606.6   10153.4
GR   1606.1   10162.3   1605.7   10168.4   1605.8   10175.7   1605.9   10183.0   1605.7   10189.2
GR   1605.8   10228.1   1605.8   10234.4   1605.5   10239.6   1604.9   10244.9   1604.6   10248.3
GR   1604.5   10253.1   1605.4   10256.0   1604.7   10261.0   1605.2   10266.0   1606.3   10271.1
GR   1606.8   10342.7   1606.7   10353.8   1606.4   10366.5   1606.5   10380.0   1606.6   10388.1
GR   1607.1   10447.1   1607.3   10457.9   1607.5   10463.2   1607.3   10471.7   1607.5   10479.9
GR   1607.0   10486.3   1607.0   10495.1   1607.2   10503.7   1607.2   10508.4   1607.4   10515.7
GR   1606.4   10521.3   1607.5   10524.8   1607.4   10533.1   1607.4   10542.9   1607.5   10559.0
GR   1608.0   10649.5   1607.7   10659.7   1608.2   10662.2   1608.3   10675.2   1608.7   10685.3
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QT       2       171       171
ET               7.1       9.1                                   10153.6   10262.4   10219.0   10230.6
        BEGIN TRIBUTARY TO STRUC.#14, REDUCE Q TO 171CFS. ADD 10 TO SECTION I.D.
        STA. 10195 = TRIB. BASELINE.
X1   11.884        75   10219.0   10230.6       615       615       615
GR   1617.8    9811.2   1616.7    9859.9   1616.8    9869.6   1616.4    9879.8   1615.9    9889.5
GR   1615.6    9965.0   1615.6    9969.7   1615.5    9973.1   1615.7    9976.6   1615.1    9981.5
GR   1614.1   10000.0   1614.1   10000.1   1614.2   10003.2   1614.4   10007.3   1614.5   10011.0
GR   1613.1   10042.8   1612.6   10048.0   1613.8   10052.0   1614.3   10056.5   1613.8   10061.2
GR   1613.6   10066.0   1613.3   10071.2   1613.0   10074.9   1612.1   10078.1   1611.9   10081.5
GR   1613.6   10083.7   1614.5   10087.1   1613.9   10091.0   1613.5   10095.2   1613.4   10100.6
GR   1613.3   10102.2   1612.9   10102.3   1614.1   10110.1   1614.7   10115.8   1614.4   10122.5
GR   1614.2   10127.8   1614.9   10135.6   1614.4   10142.2   1614.6   10148.1   1615.2   10153.6
GR   1615.0   10160.0   1614.8   10168.3   1614.6   10178.6   1614.3   10189.1   1613.8   10196.7
GR   1613.4   10204.3   1612.9   10213.1   1612.4   10219.0   1611.7   10222.5   1611.9   10227.1
GR   1613.5   10230.6   1613.9   10236.3   1613.5   10241.2   1613.5   10245.9   1613.8   10253.1
GR   1614.0   10258.4   1614.1   10262.4   1613.7   10267.3   1613.2   10273.1   1612.8   10278.5
GR   1612.8   10283.4   1613.2   10288.0   1612.9   10291.9   1612.0   10295.9   1612.8   10300.2
GR   1613.1   10306.5   1613.1   10313.3   1612.8   10321.5   1612.9   10329.6   1612.4   10337.4
GR   1612.8   10341.1   1612.9   10347.3   1613.4   10354.5   1613.6   10360.7   1614.0   10365.5

ET               7.1       9.1                                   10017.4   10355.7   10263.0   10287.0
        STA. 10275 = TRIB. BASELINE.
X1   12.000        95   10270.2   10278.6       650       660       690
GR   1623.7    9800.1   1623.6    9805.1   1623.3    9809.8   1623.5    9817.1   1623.3    9822.4
GR   1623.0    9857.0   1622.7    9864.9   1622.4    9875.3   1621.9    9883.2   1621.9    9890.6
GR   1621.9    9896.1   1622.1    9900.8   1621.3    9904.0   1620.7    9906.4   1621.2    9907.9
GR   1621.7    9910.3   1621.7    9914.6   1622.0    9920.7   1621.6    9925.9   1621.4    9930.1
GR   1621.5    9932.9   1622.4    9935.5   1621.4    9938.7   1620.8    9941.2   1621.4    9944.8
GR   1622.0    9948.6   1621.7    9954.6   1622.1    9958.1   1622.2    9961.7   1621.8    9966.8
GR   1621.3    9970.5   1620.8    9974.6   1620.7    9980.2   1621.7    9983.1   1622.6    9987.4
GR   1622.8   10012.0   1623.3   10017.4   1623.1   10023.2   1623.0   10030.1   1623.0   10035.9
GR   1623.2   10042.3   1622.8   10049.0   1622.7   10055.1   1622.8   10060.4   1622.4   10068.8
GR   1621.8   10113.9   1621.8   10119.1   1622.3   10125.0   1622.6   10128.0   1621.8   10131.5
GR   1622.2   10159.8   1622.5   10164.1   1622.6   10167.3   1622.5   10171.4   1622.4   10176.5
GR   1622.2   10182.1   1621.8   10187.2   1621.8   10191.4   1621.7   10196.9   1621.6   10202.9
GR   1620.7   10228.9   1620.5   10234.9   1620.5   10240.2   1620.2   10245.7   1620.1   10250.2
GR   1619.4   10253.5   1620.4   10255.0   1620.3   10259.4   1620.5   10263.0   1620.4   10267.2
GR   1619.9   10270.2   1619.2   10272.9   1618.8   10276.0   1620.3   10278.6   1621.1   10282.3
GR   1621.8   10286.8   1622.0   10290.7   1622.0   10294.9   1621.7   10298.3   1621.4   10303.3
GR   1621.9   10306.6   1622.2   10310.3   1621.6   10315.2   1621.6   10320.2   1621.7   10325.0
GR   1621.8   10330.2   1621.6   10336.1   1621.2   10341.8   1621.4   10345.6   1621.5   10349.2
GR   1622.1   10352.5   1622.3   10355.7   1622.1   10359.5   1621.7   10363.1   1622.1   10367.6
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ET                7.1       9.1                                  10046.9    10580.0      10420      10442
        STA. 10400 = TRIB. BASELINE.
X1   12.063        95   10426.6   10440.5       385       380        380
GR   1628.1    9894.0    1628.1    9899.2    1627.5    9908.9     1627.2     9915.3     1626.9     9922.9
GR   1626.6    9928.6    1625.4    9934.8    1626.6    9937.8     1626.4     9945.4     1626.7     9952.4
GR   1625.9    9954.8    1624.9    9958.1    1626.0    9962.7     1627.1     9967.9     1626.6     9973.3
GR   1626.8    9992.1    1627.1   10000.0    1627.1   10000.1     1627.2    10012.1     1626.6    10020.4
GR   1626.9   10027.4    1625.8   10034.5    1627.7   10039.5     1627.4    10043.0     1627.1    10046.9
GR   1626.7   10090.7    1626.2   10100.6    1626.5   10107.9     1626.8    10116.0     1627.1    10123.0
1
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GR   1626.5   10167.7    1626.7   10171.4    1626.8   10176.5     1627.1    10181.1     1626.4    10186.8
GR   1626.3   10255.5    1625.8   10262.8    1625.6   10269.4     1626.0    10272.4     1625.7    10278.9
GR   1625.6   10284.8    1625.6   10289.9    1625.7   10295.9     1625.9    10302.2     1626.4    10307.4
GR   1626.3   10312.9    1626.1   10319.9    1626.1   10325.6     1625.1    10336.5     1624.4    10339.1
GR   1625.1   10341.9    1624.9   10346.2    1624.8   10350.3     1624.7    10352.9     1625.0    10356.6
GR   1624.9   10360.6    1625.0   10364.4    1624.8   10369.7     1624.5    10372.6     1624.5    10375.8
GR   1624.5   10377.7    1625.0   10380.3    1625.4   10383.5     1626.1    10386.7     1626.5    10388.5
GR   1625.9   10392.0    1625.6   10394.7    1625.6   10398.0     1625.7    10402.0     1625.4    10404.8
GR   1625.2   10408.2    1625.4   10411.8    1625.3   10414.8     1625.7    10418.1     1625.5    10422.3
GR   1625.3   10426.6    1624.5   10430.9    1624.1   10434.8     1624.0    10437.0     1625.1    10440.5
GR   1625.2   10445.8    1625.0   10451.5    1624.8   10457.6     1625.1    10461.8     1625.5    10469.1
GR   1626.0   10502.7    1626.1   10507.4    1626.3   10513.6     1626.4    10523.1     1626.3    10530.6
GR   1626.3   10535.5    1626.6   10541.7    1626.6   10553.2     1626.9    10565.1     1627.0    10580.0

NC     .030      .030      .030        .3        .5
        BEGIN SUN VALLEY PARKWAY CULVERTS (1-10'X3' CULVERT- STRUC. #14)
X1   12.089         4      9995     10005       135       135        135
X3      10                                                                   1630.8     1630.8
GR   1630.8      9995    1627.4      9995    1627.4     10005     1630.8      10005

QT       2       191       191
NC    .012      .012      .012
SC   1.012        .2       2.7         0         3        10        138       12.1     1627.8     1627.4
        END CULVERTS.    WEIR FLOW EXPECTED OVER LEVEE TO RT. OF CULVERTS.
        INCREASE DISCHARGE AT THIS SECTION OF WHICH 171 CFS FLOWS THROUGH
        STRUC. #14 AND 17 CFS FLOWS ON TO STRUC. #15.
X1   12.115         4      9995     10005       138       138        138
X2                           2    1630.8    1631.0
X3      10                                                                   1631       1631
BT       9     10000    1634.2              10002.9    1634.2                10003     1633.7
BT   10043    1632.9              10051    1632.5                10067      1632                10068
BT    1631               10130     1631                10175      1632
GR    1631      9995    1627.8      9995    1627.8     10005      1631      10005

NC     .03       .03       .03
ET                7.1       9.1                                   9983      10008       9983      10008
        ET OPTION APPLIED TO LIMIT EFFECTIVE FLOW WITHIN LIMITS OF ARMORED
        WEIR LEVEE. TOP OF LEVEE, LEFT AND RIGHT =1631.0
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
        UPSTREAM OF ROAD.
X1   12.128         9      9983     10008        70        70         70
GR    1635      9500      1630      9525    1629.1      9780     1628.7       9965       1631       9973
GR    1631      9983      1629      9995      1629     10002       1631      10008

NC    .049      .049      .045        .1        .3
QT       2       532       532
ET                          9.1                                                          9961.4      10100
        REPEAT THIS SECTION FOR START OF TRIBUTERY TO STRUC. #15.
X1   -1.768        95    9961.4    9980.4       790       770        820
GR   1610.5    9810.6    1610.2    9815.2    1610.1    9821.8     1609.6     9830.4     1609.1     9837.7
GR   1608.5    9844.6    1608.1    9854.2    1607.5    9863.9     1607.3     9871.2     1607.2     9879.7
GR   1606.5    9888.2    1606.5    9894.6    1606.9    9900.0     1606.4     9907.3     1605.5     9913.3
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GR   1606.1     9921.4     1605.0     9927.6     1605.5     9930.6     1605.9     9935.1     1606.3     9942.0
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GR   1606.3     9947.4     1605.8     9953.5     1605.4     9961.4     1605.0     9968.1     1604.1     9972.4
GR   1603.4     9977.4     1605.3     9980.4     1605.2     9987.5     1605.3     9995.8     1605.7    10000.0
GR   1605.7    10000.1     1606.0    10004.9     1606.0    10012.2     1606.5    10019.9     1606.2    10026.9
GR   1606.5    10036.5     1606.6    10042.2     1606.4    10050.9     1606.1    10060.1     1606.3    10067.3
GR   1606.4    10072.2     1606.5    10076.1     1605.5    10080.8     1605.2    10085.5     1605.3    10094.1
GR   1605.5    10102.5     1605.3    10110.0     1604.3    10113.5     1603.8    10117.3     1604.0    10121.9
GR   1605.4    10126.1     1606.4    10131.0     1606.5    10137.2     1606.5    10145.8     1606.6    10153.4
GR   1606.1    10162.3     1605.7    10168.4     1605.8    10175.7     1605.9    10183.0     1605.7    10189.2
GR   1605.8    10228.1     1605.8    10234.4     1605.5    10239.6     1604.9    10244.9     1604.6    10248.3
GR   1604.5    10253.1     1605.4    10256.0     1604.7    10261.0     1605.2    10266.0     1606.3    10271.1
GR   1606.8    10342.7     1606.7    10353.8     1606.4    10366.5     1606.5    10380.0     1606.6    10388.1
GR   1607.1    10447.1     1607.3    10457.9     1607.5    10463.2     1607.3    10471.7     1607.5    10479.9
GR   1607.0    10486.3     1607.0    10495.1     1607.2    10503.7     1607.2    10508.4     1607.4    10515.7
GR   1606.4    10521.3     1607.5    10524.8     1607.4    10533.1     1607.4    10542.9     1607.5    10559.0
GR   1608.0    10649.5     1607.7    10659.7     1608.2    10662.2     1608.3    10675.2     1608.7    10685.3

QT        2        282        282
ET                 7.1        9.1                                    10365.5    10572.2    10423.0    10450.0
        BEGIN TRIBUTARY TO STRUC. #15, REDUCE Q TO 252CFS. ADD 20 TO SECTION I.D
        STA. 10435 = TRIB. BASELINE.
X1   21.890         95    10426.9    10446.7        615        615        615
GR   1614.1    10000.0     1614.1    10000.1     1614.2    10003.2     1614.4    10007.3     1614.5    10011.0
GR   1613.1    10042.8     1612.6    10048.0     1613.8    10052.0     1614.3    10056.5     1613.8    10061.2
GR   1613.6    10066.0     1613.3    10071.2     1613.0    10074.9     1612.1    10078.1     1611.9    10081.5
GR   1613.6    10083.7     1614.5    10087.1     1613.9    10091.0     1613.5    10095.2     1613.4    10100.6
GR   1613.3    10102.2     1612.9    10102.3     1614.1    10110.1     1614.7    10115.8     1614.4    10122.5
GR   1614.2    10127.8     1614.9    10135.6     1614.4    10142.2     1614.6    10148.1     1615.2    10153.6
GR   1615.0    10160.0     1614.8    10168.3     1614.6    10178.6     1614.3    10189.1     1613.8    10196.7
GR   1613.9    10204.3     1613.4    10213.1     1612.4    10219.0     1611.7    10222.5     1611.9    10227.1
GR   1613.5    10230.6     1613.9    10236.3     1613.5    10241.2     1613.5    10245.9     1613.8    10253.1
GR   1614.0    10258.4     1614.1    10262.4     1613.7    10267.3     1613.2    10273.1     1612.8    10278.5
GR   1612.8    10283.4     1613.2    10288.0     1612.9    10291.9     1612.0    10295.9     1612.8    10300.2
GR   1613.1    10306.5     1613.1    10313.3     1612.8    10321.5     1612.9    10329.6     1612.4    10337.4
GR   1612.8    10341.1     1612.9    10347.3     1613.4    10354.5     1613.6    10360.7     1614.3    10365.5
GR   1614.1    10401.4     1613.8    10406.6     1613.7    10412.4     1613.5    10419.9     1613.4    10424.1
GR   1612.5    10426.9     1613.3    10429.2     1612.5    10433.2     1612.5    10437.1     1612.7    10442.0
GR   1612.6    10446.7     1613.3    10451.7     1613.8    10455.7     1613.9    10459.5     1613.7    10463.0
GR   1613.4    10466.7     1614.2    10469.3     1614.3    10473.5     1613.8    10478.3     1614.0    10482.0
GR   1613.9    10487.3     1613.4    10492.0     1613.8    10497.3     1613.7    10504.2     1614.1    10509.0
GR   1615.1    10545.1     1615.6    10552.4     1615.5    10558.7     1615.4    10567.1     1615.9    10572.2

ET                 7.1        9.1                                    10722.7    10961.7      10850      10888
        STA. 10835 = TRIB. BASELINE.
X1   22.016         90    10872.0    10886.5        650        660        690
GR   1620.7    10228.9     1620.5    10234.9     1620.5    10240.2     1620.2    10245.7     1620.1    10250.2
GR   1619.4    10253.5     1620.4    10255.0     1620.3    10259.4     1620.5    10263.0     1620.4    10267.2
GR   1619.9    10270.2     1619.2    10272.9     1618.8    10276.0     1620.3    10278.6     1621.1    10282.3
GR   1621.8    10286.8     1622.0    10290.7     1622.0    10294.9     1621.7    10298.3     1621.4    10303.3
GR   1621.9    10306.6     1622.2    10310.3     1621.6    10315.2     1621.6    10320.2     1621.7    10325.0
GR   1621.8    10330.2     1621.6    10336.1     1621.2    10341.8     1621.4    10345.6     1621.5    10349.2
GR   1622.1    10352.5     1622.3    10355.7     1622.1    10359.5     1621.7    10363.1     1622.1    10367.6
GR   1622.5    10712.6     1622.8    10718.3     1622.9    10722.7     1622.6    10727.5     1622.2    10732.1
GR   1621.6    10739.5     1620.5    10744.8     1620.2    10749.4     1620.6    10753.2     1620.7    10758.0
GR   1621.2    10759.9     1620.4    10760.0     1621.3    10764.9     1622.1    10768.0     1622.0    10772.0
1
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GR   1621.6    10776.1     1621.7    10779.7     1621.8    10784.3     1622.5    10788.9     1622.4    10794.2
GR   1621.9    10797.0     1621.8    10803.5     1621.9    10808.0     1621.9    10814.8     1621.8    10819.5
GR   1622.1    10825.3     1622.0    10829.6     1620.6    10834.1     1621.2    10836.7     1621.6    10840.0
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GR   1622.2   10844.5    1622.5   10850.1    1622.3   10854.2    1622.1   10859.2    1622.3   10864.7
GR   1621.7   10868.3    1620.6   10872.0    1619.8   10875.6    1619.4   10879.3    1619.7   10883.4
GR   1621.1   10886.5    1622.2   10892.9    1622.7   10897.5    1623.0   10902.4    1622.7   10907.3
GR   1622.4   10910.4    1622.8   10916.2    1623.1   10921.9    1623.3   10927.2    1622.9   10931.1
GR   1622.8   10936.0    1622.6   10942.0    1622.5   10951.1    1622.8   10956.2    1623.3   10961.7

NC     .030      .030      .030        .3         .5
       BEGIN SUNVALLEY PARKWAY CULVERTS (4-10'X3' CULVERTS- STRUC. #15)
X1   22.037         4    9978.5   10021.5        110        110        110
X3       10                                                                  1627.2     1627.2
GR   1627.1    9978.5    1623.6    9978.5    1623.6   10021.5    1627.1   10021.5

NC     .012      .012      .012
SC    4.012        .2       2.9         0          3         10        158       12.3     1624.2     1623.6
       END CULVERTS
X1   22.067         4    9978.5   10021.5        158        158        158
X2                             2    1627.2    1626.8
X3       10                                                                  1626.8     1626.8
BT        9     10000    1630.5              10142.9     1629.6                10143     1629.1
BT    10183    1628.3              10191     1627.9                10195     1626.8                10200
BT   1626.8              10204      1628                10302     1629.0
GR   1626.8    9978.5    1624.2    9978.5    1624.2   10021.5    1626.8   10021.5

NC     .030      .030      .030
       FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
       BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
       UPSTREAM OF ROAD.
X1   22.076         5      9971     10033         50         50         50
GR    1627      9971      1626      9977      1626      10033      1627      10050      1628      10090
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*PROF 1

CCHV=     .100 CEHV=     .300
*SECNO  .086

3470 ENCROACHMENT STATIONS=     9775.2   10317.8  TYPE=      1  TARGET=      542.600
       FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
       MODEL WITH EQUAL CONVEYANCE REDUCTION (METHOD 4).
       STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
       CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
       CONFLUENCE WITH WASH NO.1
       CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
       STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED
     .086      4.63   1511.83       .00       .00   1512.53       .70       .00       .00   1510.60
    766.0      94.7     667.0       4.3      40.7      93.3       2.6        .0        .0   1510.90
      .00      2.33      7.15      1.66      .049      .042      .049      .000   1507.20   9895.29
  .008486        0.        0.        0.         0         0         5       .00     90.33   9985.62


*SECNO  .209

3470 ENCROACHMENT STATIONS=     9808.3   10226.6  TYPE=      1  TARGET=      418.300
     .209      4.89   1517.09       .00       .00   1517.49       .40      4.93       .03   1516.10
    766.0       5.7     468.5     291.8       3.2      75.7     117.2       2.5       1.9   1516.10
      .04      1.78      6.19      2.49      .049      .042      .049      .000   1512.20   9898.17
  .006469      650.      675.      650.         4         0         0       .00    164.25  10062.42
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*SECNO  .355

3470 ENCROACHMENT STATIONS=     9660.6   10181.2  TYPE=      1  TARGET=      520.601
      .355      4.18   1523.88       .00       .00   1524.14       .26      6.63       .01   1523.20
     766.0     100.3     230.8     434.9      34.7      45.8     116.1       6.1       5.3   1523.80
       .09      2.89      5.04      3.74      .049      .045      .049      .000   1519.70   9934.47
   .011061      775.      800.      800.         4         0         0       .00    210.01  10144.48


*SECNO  .499

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9736.4   10398.2  TYPE=      1  TARGET=      661.800
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


      .499      3.85   1532.65   1532.58       .00   1533.00       .35      8.83       .03   1532.00
     766.0       4.6     405.1     356.2       3.9      66.9     132.7       9.7       9.6   1532.50
       .14      1.20      6.05      2.69      .049      .045      .049      .000   1528.80   9965.23
   .011609      790.      790.      770.        13         9         0       .00    269.89  10360.39


*SECNO  .645

3470 ENCROACHMENT STATIONS=     9880.8   10325.9  TYPE=      1  TARGET=      445.101
      .645      2.79   1540.89       .00       .00   1541.06       .17      8.04       .02   1540.30
     649.0     233.0     203.9     212.1      78.3      45.4     103.2      13.4      14.9   1540.40
       .21      2.98      4.49      2.06      .049      .045      .049      .000   1538.10   9896.82
   .009539      780.      760.      750.         8         0         0       .00    340.50  10237.32


*SECNO  .790

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9915.1   10490.3  TYPE=      1  TARGET=      575.200
      .790      3.74   1549.84       .00       .00   1550.11       .28      9.02       .03   1549.70
     649.0      84.4     189.8     374.8      25.5      34.2     104.4      16.8      19.4   1549.40
       .26      3.31      5.55      3.59      .049      .045      .049      .000   1546.10   9956.70
   .015485      770.      760.      740.         4         0         0       .00    186.66  10150.11


*SECNO  .938

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9725.7   10157.8  TYPE=      1  TARGET=      432.100
      .938      2.40   1558.50       .00       .00   1558.64       .14      8.52       .01   1558.30
     649.0     116.0     275.1     257.8      48.4      71.1     123.9      20.4      24.2   1557.60
       .33      2.40      3.87      2.08      .049      .045      .049      .000   1556.10   9794.44
   .008195      770.      785.      770.         6         0         0       .00    350.24  10154.56


*SECNO 1.084
```

3265 DIVIDED FLOW

1

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

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9702.7 10112.5 TYPE= 1 TARGET= 409.800

1.084	2.73	1566.33	1566.33	.00	1566.70	.37	7.86	.07	1565.10
649.0	228.8	342.8	77.4	81.4	55.5	27.3	24.1	29.2	1565.90
.38	2.81	6.17	2.84	.049	.045	.049	.000	1563.60	9826.04
.012593	790.	790.	760.	5	8	0	.00	206.42	10052.99

*SECNO 1.221

3470 ENCROACHMENT STATIONS= 9910.6 10307.4 TYPE= 1 TARGET= 396.801

1.221	2.73	1574.23	.00	.00	1574.39	.15	7.66	.02	1573.90
532.0	102.3	167.3	262.4	40.5	39.3	105.9	27.0	32.7	1573.60
.45	2.52	4.26	2.48	.049	.045	.049	.000	1571.50	9920.14
.008842	720.	725.	710.	5	0	0	.00	219.84	10139.98

*SECNO 1.347

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9855.6 10271.1 TYPE= 1 TARGET= 415.500

1.347	3.00	1581.30	.00	.00	1581.59	.28	7.16	.04	1580.30
532.0	70.2	241.0	220.8	28.8	43.0	79.4	29.6	35.9	1580.90
.50	2.44	5.60	2.78	.049	.045	.049	.000	1578.30	9926.06
.012354	690.	690.	690.	8	0	0	.00	191.14	10127.09

*SECNO 1.484

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9578.7 10445.2 TYPE= 1 TARGET= 866.500

1.484	2.73	1588.63	.00	.00	1588.80	.17	7.21	.01	1587.30
532.0	26.3	280.4	225.3	13.5	70.5	92.9	32.5	39.4	1587.00
.56	1.94	3.98	2.42	.049	.045	.049	.000	1585.90	10019.58
.007308	770.	790.	750.	4	0	0	.00	211.97	10252.65

1

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

```
*SECNO 1.622

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9895.3   10585.0  TYPE=      1  TARGET=      689.700
    1.622      3.05   1597.95   1597.95       .00   1598.22       .27      6.50       .03   1596.40
    532.0      15.4     232.0     284.5       6.2      39.9     128.2      35.7      44.1   1596.20
      .62      2.51      5.81      2.22      .049      .045      .049      .000   1594.90   9953.45
  .009638      735.      760.      800.         9         8         0       .00    307.34  10302.16


*SECNO 1.768

3265 DIVIDED FLOW

        THIS SECTION IS DOWNSTREAM COMMON SECTION FOR TRIBUTARYS TO STRUC.#14\15
    1.768      2.67   1606.07       .00       .00   1606.25       .18      8.02       .01   1605.40
    532.0      28.7     130.4     373.0      15.3      29.2     123.8      38.7      49.1   1605.30
      .69      1.87      4.46      3.01      .049      .045      .049      .000   1603.40   9909.46
  .010760      790.      820.      770.         5         0         0       .00    250.21  10270.06


*SECNO 1.888

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9811.2   10153.6  TYPE=      1  TARGET=      342.399
    1.888      1.90   1613.60   1613.60       .00   1613.87       .27      7.11       .03   1613.00
     86.0      27.9      53.1       5.0      10.9      10.7       2.9      40.1      51.2   1613.60
      .73      2.55      4.97      1.71      .049      .045      .049      .000   1611.70  10031.40
  .019393      615.      615.      615.        15        13         0       .00     50.44  10106.86


*SECNO 2.007

3265 DIVIDED FLOW

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


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


3470 ENCROACHMENT STATIONS=     9800.1   10017.4  TYPE=      1  TARGET=      217.301
    2.007      3.21   1622.01       .00       .00   1622.10       .10      8.21       .02   1621.30
     86.0      45.2      40.6        .2      25.2      13.2        .2      40.6      52.3   1621.70
      .81      1.80      3.08       .77      .049      .045      .049      .000   1618.80   9881.67
  .008394      650.      690.      660.         7         0         0       .00     90.24   9984.52


*SECNO 2.076
```

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9894.0 10046.9 TYPE= 1 TARGET= 152.900

2.076	2.70	1626.70	1626.70	.00	1626.93	.23	4.58	.04	1626.70
86.0	24.0	50.5	11.5	9.1	11.0	5.6	40.9	53.0	1626.00
.83	2.62	4.58	2.06	.049	.045	.049	.000	1624.00	9926.67
.018555	385.	380.	380.	6	10	0	.00	61.97	10036.87

*SECND 2.128

3265 DIVIDED FLOW

2.128	1.87	1630.67	.00	.00	1630.90	.23	3.97	.00	1630.10
86.0	6.2	76.7	3.1	3.2	18.9	3.2	41.0	53.2	1630.30
.85	1.97	4.06	.96	.049	.045	.049	.000	1628.80	9995.90
.012471	280.	290.	0.	4	0	0	.00	45.11	10042.04

CCHV= .300 CEHV= .500
*SECND 2.142

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.24

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1635.00 ELREA= 1635.00

1
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BEGIN SUN VALLEY PARKWAY CULVERTS (4-10'X4' CULVERTS- STRUC.#13)

2.142	1.12	1631.12	.00	.00	1631.17	.05	.21	.05	1635.00
86.0	.0	86.0	.0	.0	48.3	.0	41.1	53.2	1635.00
.87	.00	1.78	.00	.000	.030	.000	.000	1630.00	9978.50
.001186	75.	75.	75.	3	0	0	.00	43.00	10021.50

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	2.70	.00	4.00	10.00	154.00	12	3	1631.00	1630.00

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECND 2.171

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1631.824 EGOC = 1631.949 PCWSE= 1631.118 ELTRD= 1635.000

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

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1631.82	1631.95	.78	0.	86.	2.307	160.0	1635.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1635.00 ELREA= 1635.00

```
        END CULVERTS
    2.171      .87   1631.87      .00      .00   1631.95      .08      .78      .00   1635.00
     86.0       .0     86.0       .0       .0     37.3       .0     41.2     53.4   1635.00
      .88      .00      2.31      .00     .000     .012     .000     .000  1631.00   9978.50
  .000443     154.     154.     154.        2        0        0      .00    43.00  10021.50


*SECNO 2.186
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
        UPSTREAM OF ROAD.
    2.186      .52   1633.52   1633.52      .00   1633.75      .24      .10      .08   1634.00
     86.0       .0     86.0       .0       .0     22.0       .0     41.3     53.5   1635.00
      .89      .00      3.90      .00     .000     .030     .000     .000  1633.00   9976.84
  .016828      80.      80.      80.       20       11        0      .00    46.48  10023.32


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


CCHV=     .100 CEHV=     .300
*SECNO -1.768
START TRIB COMP
    -1.768     1.768  1606.072

3265 DIVIDED FLOW

        REPEAT THIS SECTION FOR START OF TRIBUTARY TO STRUC. #14.
   -1.768      2.67   1606.07      .00      .00   1606.25      .18      .00      .00   1605.40
    532.0      28.5     130.7    372.8     15.1     29.2    123.0     43.0     56.1   1605.30
      .96      1.88      4.48     3.03     .049     .045     .049     .000  1603.40   9909.48
  .010918      790.     820.     770.        0        0        0      .00   249.79  10270.04


*SECNO 11.884

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10153.6   10262.4  TYPE=      1  TARGET=      108.801
        BEGIN TRIBUTARY TO STRUC.#14, REDUCE Q TO 171CFS. ADD 10 TO SECTION I.D.
        STA. 10195 = TRIB. BASELINE.
   11.884      2.15   1613.85   1613.85      .00   1614.24      .39     7.27      .06   1612.40
    171.0      51.2     112.9      6.9     15.2     19.8      4.7     44.4     58.3   1613.50
      .99      3.38      5.72     1.44     .049     .045     .049     .000  1611.70  10195.94
  .015449      615.     615.     615.        4       15        0      .00    57.17  10254.43


*SECNO 12.000

3265 DIVIDED FLOW
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3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

3470 ENCROACHMENT STATIONS= 10017.4 10355.7 TYPE= 1 TARGET= 338.300
STA. 10275 = TRIB. BASELINE.

12.000	2.43	1621.23	.00	.00	1621.40	.16	7.13	.02	1619.90
171.0	100.5	67.2	3.3	41.5	15.8	2.0	45.2	59.3	1620.30
1.05	2.42	4.26	1.66	.049	.045	.049	.000	1618.80	10213.69
.007753	650.	690.	660.	5	0	0	.00	70.31	10342.31

1

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

*SECNO 12.063

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 10046.9 10580.0 TYPE= 1 TARGET= 533.100
STA. 10400 = TRIB. BASELINE.

12.063	1.46	1625.46	.00	.00	1625.63	.16	4.23	.00	1625.30
171.0	92.2	55.0	23.7	32.3	13.3	10.6	45.7	60.0	1625.10
1.08	2.86	4.13	2.24	.049	.045	.049	.000	1624.00	10332.51
.017032	385.	380.	380.	6	0	0	.00	108.76	10468.49

CCHV= .300 CEHV= .500
*SECNO 12.089

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1630.80 ELREA= 1630.80

BEGIN SUN VALLEY PARKWAY CULVERTS (1-10'X3' CULVERT- STRUC. #14)

12.089	2.08	1629.48	1629.48	.00	1630.53	1.05	2.26	.44	1630.80
171.0	.0	171.0	.0	.0	20.8	.0	45.8	60.2	1630.80
1.09	.00	8.21	.00	.000	.030	.000	.000	1627.40	9995.00
.016446	135.	135.	135.	3	11	0	.00	10.00	10005.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	1	.012	.20	2.70	.00	3.00	10.00	138.00	12	1	1627.80	1627.40

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 12.115

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.13

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

1

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

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1631.45	1631.39	.65	14.	177.	7.859	30.0	1631.00	70.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1631.00 ELREA= 1631.00

END CULVERTS. WEIR FLOW EXPECTED OVER LEVEE TO RT. OF CULVERTS.
INCREASE DISCHARGE AT THIS SECTION OF WHICH 171 CFS FLOWS THROUGH
STRUC. #14 AND 17 CFS FLOWS ON TO STRUC. #15.

12.115	2.42	1630.22	.00	.00	1631.18	.96	.65	.00	1631.00
191.0	.0	191.0	.0	.0	24.3	.0	45.9	60.3	1631.00
1.09	.00	7.86	.00	.000	.012	.000	.000	1627.80	9995.00
.002091	138.	138.	138.	4	0	0	.00	10.00	10005.00

*SECNO 12.128
3280 CROSS SECTION 12.13 EXTENDED .16 FEET

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS= 9983.0 10008.0 TYPE= 1 TARGET= 25.000
ET OPTION APPLIED TO LIMIT EFFECTIVE FLOW WITHIN LIMITS OF ARMORED
WEIR LEVEE. TOP OF LEVEE, LEFT AND RIGHT =1631.0
FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
UPSTREAM OF ROAD.

12.128	2.45	1631.15	1630.92	.00	1631.59	.44	.25	.16	1631.00
191.0	.0	191.0	.0	.0	36.0	.0	46.0	60.3	100000.00
1.10	.00	5.31	.00	.000	.030	.000	.000	1628.70	9983.00
.007369	70.	70.	70.	11	11	0	.00	25.00	10008.00

CCHV= .100 CEHV= .300
*SECNO -1.768

1

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

START TRIB COMP
-1.768 1.768 1606.072

3265 DIVIDED FLOW

REPEAT THIS SECTION FOR START OF TRIBUTERY TO STRUC. #15.

-1.768	2.67	1606.07	.00	.00	1606.25	.18	.00	.00	1605.40
532.0	28.5	130.7	372.8	15.1	29.2	123.0	47.8	62.8	1605.30
1.16	1.88	4.48	3.03	.049	.045	.049	.000	1603.40	9909.48
.010918	790.	820.	770.	0	0	0	.00	249.79	10270.04

*SECNO 21.890

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 10365.5 10572.2 TYPE= 1 TARGET= 206.700
BEGIN TRIBUTARY TO STRUC. #15, REDUCE Q TO 252CFS. ADD 20 TO SECTION I.D
STA. 10435 = TRIB. BASELINE.

21.890	2.49	1614.19	1614.19	.00	1614.50	.31	7.59	.04	1612.50
282.0	44.2	161.2	76.7	15.5	29.7	28.0	49.5	65.4	1612.60
1.20	2.85	5.42	2.73	.049	.045	.049	.000	1611.70	10385.48
.015923	615.	615.	615.	10	12	0	.00	121.42	10512.20

*SECNO 22.016

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 10722.7 10961.7 TYPE= 1 TARGET= 239.000
STA. 10835 = TRIB. BASELINE.

22.016	3.15	1621.95	.00	.00	1622.19	.24	7.68	.01	1620.60
282.0	135.4	143.3	3.3	49.2	29.6	2.1	50.7	67.1	1621.10
1.25	2.75	4.83	1.57	.049	.045	.049	.000	1618.80	10735.18
.008584	650.	690.	660.	5	0	0	.00	108.21	10891.45

CCHV= .300 CEHV= .500
1

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

*SECNO 22.037
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1627.20 ELREA= 1627.20

BEGIN SUNVALLEY PARKWAY CULVERTS (4-10'X3' CULVERTS- STRUC. #15)

22.037	1.10	1624.70	1624.70	.00	1625.25	.55	1.18	.16	1627.10
282.0	.0	282.0	.0	.0	47.2	.0	50.8	67.3	1627.10
1.26	.00	5.98	.00	.000	.030	.000	.000	1623.60	9978.50
.013736	110.	110.	110.	20	22	0	.00	43.00	10021.50

SPECIAL CULVERT

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SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    4         .012      .20       2.90      .00       3.00      10.00     158.00    12        3         1624.20   1623.60

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 22.067

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1626.020  EGOC =   1626.049  PCWSE=   1624.698  ELTRD=   1626.800


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.60

SPECIAL CULVERT

    EGIC      EGOC       H4     QWEIR     QCULV      VCH     ACULV     ELTRD    WEIRLN
  1626.02   1626.05      .80       0.      282.     4.110     120.0   1626.80       0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1626.80 ELREA=      1626.80

       END CULVERTS
   22.067      1.59   1625.79       .00       .00   1626.05       .26       .80       .00   1626.80
    282.0        .0     282.0        .0        .0     68.6        .0      51.0      67.5   1626.80
     1.27       .00      4.11       .00      .000      .012      .000      .000   1624.20   9978.50
  .000650      158.      158.      158.         2         0         0       .00     43.00  10021.50


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


*SECNO 22.076
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
       FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
       BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
       UPSTREAM OF ROAD.
   22.076       .87   1626.87   1626.87       .00   1627.26       .39       .09       .06   1627.00
    282.0        .0     260.6      21.4        .0     51.1       6.5      51.1      67.5   1626.00
     1.27       .00      5.10      3.31      .000      .030      .030      .000   1626.00   9971.77
  .013514       50.       50.       50.        20        11         0       .00     76.05  10047.82


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T1      SUN VALLEY PARKWAY NORTH FIS  CONTRACT:FCDMC NO. 90-04   FILE:SEE PG. 1
T2      100-YEAR WATER SURFACE PROFILE                          A-N WEST INC.
T3      WASH #3 AND TRIBS. FLOODWAY

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

    -10        3                           0                                     1512.63

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

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


 *PROF 2
0

 CCHV=     .100 CEHV=     .300
 *SECNO  .086

 3470 ENCROACHMENT STATIONS=     9952.6    9980.0  TYPE=      1  TARGET=       27.400
        FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
        MODEL WITH EQUAL CONVEYANCE REDUCTION (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH NO.1
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED
      .086      5.43   1512.63       .00   1511.83   1513.32       .69       .00       .00   1510.60
     766.0       .0     766.0       .0       .0     115.3       .0       .0       .0 100000.00
       .00      .00      6.65       .00      .000      .042      .000      .000   1507.20   9952.60
   .006514       0.        0.        0.        0         0         0       .00     27.40   9980.00


 *SECNO  .209

 3470 ENCROACHMENT STATIONS=     9904.1    9925.6  TYPE=      1  TARGET=       21.500
      .209      5.69   1517.89       .00   1517.09   1518.95      1.06      5.52       .11   1516.10
     766.0       .0     766.0       .0       .0      92.8       .0       1.6       .4 100000.00
       .02      .00      8.25       .00      .000      .042      .000      .000   1512.20   9904.10
   .010562      650.      675.      650.        3         0         0       .00     21.50   9925.60


 *SECNO  .355

 3301 HV CHANGED MORE THAN HVINS


 3470 ENCROACHMENT STATIONS=     9971.0   10049.0  TYPE=      1  TARGET=       78.000
      .355      5.19   1524.89       .00   1523.88   1525.19       .31      6.17       .07   1523.20
     766.0      58.1     345.6     362.3      19.7      70.4      86.6       4.1       1.3   1523.80
       .07      2.96      4.91      4.18      .049      .045      .049      .000   1519.70   9971.00
   .005898      775.      800.      800.         4         0         0       .00     78.00  10049.00


 *SECNO  .499
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST
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3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9989.9   10050.8  TYPE=      1  TARGET=       60.909
      .499      4.49   1533.29   1533.29   1532.65   1534.18       .89      7.04       .18   1532.00
     766.0        .0     680.9      85.1        .0      85.5      26.2       6.7       2.5   1532.50
       .10       .00      7.96      3.24      .000      .045      .049      .000   1528.80   9989.90
   .015299      790.      790.      770.         8        12         0       .00     60.91  10050.81


*SECNO  .645

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9987.2   10065.6  TYPE=      1  TARGET=       78.399
      .645      3.78   1541.88       .00   1540.89   1542.19       .31      7.95       .06   1540.30
     649.0        .0     370.0     279.0        .0      72.0      80.6       9.0       3.7   1540.40
       .15       .00      5.14      3.46      .000      .045      .049      .000   1538.10   9987.20
   .007261      780.      760.      750.         5         0         0       .00     78.40  10065.60


*SECNO  .790
3280 CROSS SECTION       .79 EXTENDED       .51 FEET


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=    10000.1   10047.5  TYPE=      1  TARGET=       47.400
      .790      4.31   1550.41       .00   1549.84   1551.28       .87      8.92       .17   1549.70
     649.0        .0     375.2     273.8        .0      46.4      42.1      11.0       4.8   1549.40
       .18       .00      8.09      6.51      .000      .045      .049      .000   1546.10  10000.10
   .022832      770.      760.      740.         2         0         0       .00     47.40  10047.50


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


*SECNO  .938

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.90


3470 ENCROACHMENT STATIONS=     9906.5    9969.0  TYPE=      1  TARGET=       62.500
      .938      3.40   1559.50       .00   1558.50   1559.82       .32      8.48       .05   1558.30
     649.0        .0     552.8      96.2        .0     118.0      28.4      13.1       5.8   1557.60
       .23       .00      4.69      3.39      .000      .045      .049      .000   1556.10   9906.50
   .006330      770.      785.      770.         6         0         0       .00     62.50   9969.00
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*SECNO 1.084

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9987.4   10022.9  TYPE=      1  TARGET=       35.500
     1.084      3.29   1566.89       .00   1566.33   1567.85       .96      7.84       .19   1565.10
     649.0       .0     568.5      80.5       .0      69.4      15.6      15.2       6.7   1565.90
       .25      .00      8.19      5.16      .000      .045      .049      .000   1563.60   9987.40
   .017997      790.      790.      760.         4         0         0       .00     35.50  10022.90


*SECNO 1.221

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9940.0   10000.0  TYPE=      1  TARGET=       60.000
     1.221      3.69   1575.19       .00   1574.23   1575.48       .29      7.57       .07   1573.90
     532.0     225.7     302.3       4.0      63.9      62.0       2.2      17.0       7.5   1573.60
       .30      3.53      4.88      1.81      .049      .045      .049      .000   1571.50   9940.00
   .006292      720.      725.      710.         5         0         0       .00     60.00  10000.00


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


*SECNO 1.347

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9971.1   10010.3  TYPE=      1  TARGET=       39.200
     1.347      3.53   1581.83   1581.81   1581.30   1582.73       .89      7.06       .18   1580.30
     532.0      90.0     442.0        .0      19.5      54.9        .0      18.6       8.3 100000.00
       .33      4.62      8.05       .00      .049      .045      .000      .000   1578.30   9971.10
   .019495      690.      690.      690.         7        11         0       .00     39.20  10010.30


*SECNO 1.484

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.95


3470 ENCROACHMENT STATIONS=    10060.0   10110.0  TYPE=      1  TARGET=       50.000
     1.484      3.64   1589.54       .00   1588.63   1589.83       .29      7.04       .06   1587.30
     532.0      18.0     480.2      33.8       6.9     108.4      10.7      20.4       9.1   1587.00
       .38      2.60      4.43      3.18      .049      .045      .049      .000   1585.90  10060.00
   .005116      770.      790.      750.         6         0         0       .00     50.00  10110.00
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*SECNO 1.622

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9963.7   10004.6  TYPE=      1  TARGET=       40.899
     1.622      3.45   1598.35   1598.35   1597.95   1599.24       .89      6.78       .18   1596.40
     532.0       .0     387.8     144.2        .0      46.4      30.0      22.2       9.9   1596.20
       .41      .00      8.35      4.80      .000      .045      .049      .000   1594.90   9963.70
   .018863     735.      760.      800.         4        11         0       .00     40.90  10004.60


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


*SECNO 1.768

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9961.4   10100.0  TYPE=      1  TARGET=      138.600
        THIS SECTION IS DOWNSTREAM COMMON SECTION FOR TRIBUTARYS TO STRUC.#14\15
     1.768      3.59   1606.99       .00   1606.07   1607.17       .18      7.86       .07   1605.40
     532.0       .0     202.1     329.9        .0      46.7     124.1      24.4      11.5   1605.30
       .47      .00      4.33      2.66      .000      .045      .049      .000   1603.40   9961.40
   .006039     790.      820.      770.         6         0         0       .00    138.60  10100.00


*SECNO 1.888

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=    10074.9   10083.7  TYPE=      1  TARGET=        8.800
     1.888      2.11   1613.81   1613.81   1613.60   1614.54       .73      4.39       .17   1613.00
      86.0       .0      86.0        .0        .0      12.5        .0      25.7      12.5 100000.00
       .50      .00      6.86       .00      .000      .045      .000      .000   1611.70  10074.90
   .034161     615.      615.      615.        20        14         0       .00      8.80  10083.70


*SECNO 2.007
3280 CROSS SECTION      2.01 EXTENDED       .79 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.34
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3470 ENCROACHMENT STATIONS=     9970.5    9983.1  TYPE=      1  TARGET=       12.600
     2.007      4.08   1622.88       .00   1622.01   1623.07       .19      8.47       .05   1621.30
      86.0        .0      86.0        .0        .0      24.4        .0      26.0      12.7 100000.00
       .55       .00      3.53       .00      .000      .045      .000      .000   1618.80   9970.50
   .006263      650.      690.      660.         7         0         0       .00     12.60   9983.10
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

#SECNO 2.076

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

3470 ENCROACHMENT STATIONS=     9952.7    9962.7  TYPE=      1  TARGET=       10.000
     2.076      2.99   1626.99       .00   1626.70   1627.59       .59      4.39       .12 100000.00
      86.0        .0      86.0        .0        .0      13.9        .0      26.2      12.8 100000.00
       .57       .00      6.19       .00      .000      .045      .000      .000   1624.00   9952.70
   .028121      385.      380.      380.         4         0         0       .00     10.00   9962.70

#SECNO 2.128

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.00

3470 ENCROACHMENT STATIONS=    10003.5   10019.5  TYPE=      1  TARGET=       16.000
     2.128      2.26   1631.06       .00   1630.67   1631.25       .18      3.62       .04   1630.10
      86.0        .0      86.0        .0        .0      25.0        .0      26.3      12.9 100000.00
       .59       .00      3.43       .00      .000      .045      .000      .000   1628.80  10003.50
   .007018      280.      290.        0.         3         0         0       .00     16.00  10019.50

CCHV=     .300 CEHV=     .500
#SECNO 2.142

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.37

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1635.00 ELREA=      1635.00

        BEGIN SUN VALLEY PARKWAY CULVERTS (4-10'X4' CULVERTS- STRUC.#13)
     2.142      1.37   1631.37       .00   1631.12   1631.40       .03       .11       .05   1635.00
      86.0        .0      86.0        .0        .0      58.9        .0      26.4      12.9   1635.00
       .61       .00      1.46       .00      .000      .030      .000      .000   1630.00   9978.50
   .000619       75.       75.       75.         3         0         0       .00     43.00  10021.50
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST
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SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     4         .012      .20      2.70       .00      4.00     10.00     154.00     12        3       1631.00   1630.00

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 2.171

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1631.824  EGOC =   1632.042  PCWSE=   1631.369  ELTRD=   1635.000


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

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
   1631.82   1632.04       .64       0.       86.     2.045     160.0   1635.00        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1635.00 ELREA=      1635.00

        END CULVERTS
     2.171       .98   1631.98       .00   1631.87   1632.04       .06       .64       .00   1635.00
      86.0        .0      86.0        .0        .0      42.0        .0      26.6      13.1   1635.00
       .63       .00      2.05       .00      .000      .012      .000      .000   1631.00   9978.50
   .000298       154.      154.      154.         2         0         0       .00     43.00  10021.50


*SECNO 2.186
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
        UPSTREAM OF ROAD.
     2.186       .51   1633.51   1633.51   1633.52   1633.75       .24       .07       .09   1634.00
      86.0        .0      86.0        .0        .0      21.9        .0      26.6      13.2   1635.00
       .63       .00      3.92       .00      .000      .030      .000      .000   1633.00   9976.86
   .017061       80.       80.       80.        20        11         0       .00     46.45  10023.31


CCHV=     .100 CEHV=     .300
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO -1.768
START TRIB COMP
    -1.768     1.768  1606.991

3470 ENCROACHMENT STATIONS=     9961.4   10100.0  TYPE=      1  TARGET=      138.600
       REPEAT THIS SECTION FOR START OF TRIBUTARY TO STRUC. #14.
    -1.768      3.59   1606.99       .00   1606.07   1607.17       .18       .00       .00   1605.40
     532.0        .0     202.4     329.6        .0      46.6     123.7      28.4      14.8   1605.30
       .70       .00      4.34      2.66      .000      .045      .049      .000   1603.40   9961.40
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   .006081      790.      820.      770.         0         0         0       .00    138.60  10100.00


*SECNO 11.884
3280 CROSS SECTION     11.88 EXTENDED       .03 FEET


3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=    10219.0   10230.6  TYPE=      1  TARGET=       11.600
       BEGIN TRIBUTARY TO STRUC.#14, REDUCE Q TO 171CFS. ADD 10 TO SECTION I.D.
       STA. 10195 = TRIB. BASELINE.
    11.884      2.33   1614.03   1614.03   1613.85   1614.98       .95      5.02       .23   1612.40
     171.0        .0     171.0        .0        .0      21.8        .0      29.7      15.9 100000.00
       .72       .00      7.84       .00      .000      .045      .000      .000   1611.70  10219.00
   .031705      615.      615.      615.        20        14         0       .00     11.60  10230.60


*SECNO 12.000
3280 CROSS SECTION     12.00 EXTENDED       .07 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.43


3470 ENCROACHMENT STATIONS=    10263.0   10287.0  TYPE=      1  TARGET=       24.000
       STA. 10275 = TRIB. BASELINE.
1
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


    12.000      3.37   1622.17       .00   1621.23   1622.43       .26      7.38       .07   1619.90
     171.0      39.7     110.1      21.1      13.3      23.7       8.7      30.2      16.2   1620.30
       .77      2.99      4.65      2.41      .049      .045      .049      .000   1618.80  10263.00
   .005379      650.      690.      660.         8         0         0       .00     24.00  10287.00


*SECNO 12.063
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10420.0   10442.0  TYPE=      1  TARGET=       22.000
       STA. 10400 = TRIB. BASELINE.
    12.063      2.12   1626.12   1626.12   1625.46   1626.77       .65      3.72       .12   1625.30
     171.0      14.8     151.3       4.9       4.4      22.3       1.5      30.6      16.4   1625.10
       .79      3.39      6.77      3.28      .049      .045      .049      .000   1624.00  10420.00
   .022946      385.      380.      380.         5        14         0       .00     22.00  10442.00


CCHV=     .300 CEHV=     .500
*SECNO 12.089
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
```

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1630.80 ELREA= 1630.80

BEGIN SUN VALLEY PARKWAY CULVERTS (1-10'X3' CULVERT- STRUC. #14)

12.089	2.07	1629.47	1629.47	1629.48	1630.53	1.06	2.63	.20	1630.80
171.0	.0	171.0	.0	.0	20.7	.0	30.6	16.4	1630.80
.79	.00	8.26	.00	.000	.030	.000	.000	1627.40	9995.00
.016716	135.	135.	135.	2	5	0	.00	10.00	10005.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	1	.012	.20	2.70	.00	3.00	10.00	138.00	12	1	1627.80	1627.40

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

#SECNO 12.115

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.08

1

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

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1631.45	1631.39	.64	13.	177.	7.988	30.0	1631.00	70.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1631.00 ELREA= 1631.00

END CULVERTS. WEIR FLOW EXPECTED OVER LEVEE TO RT. OF CULVERTS.
INCREASE DISCHARGE AT THIS SECTION OF WHICH 171 CFS FLOWS THROUGH
STRUC. #14 AND 17 CFS FLOWS ON TO STRUC. #15.

12.115	2.38	1630.18	.00	1630.22	1631.17	.99	.64	.00	1631.00
191.0	.0	191.0	.0	.0	23.9	.0	30.7	16.4	1631.00
.80	.00	7.99	.00	.000	.012	.000	.000	1627.80	9995.00
.002191	138.	138.	138.	4	0	0	.00	10.00	10005.00

#SECNO 12.128
3280 CROSS SECTION 12.13 EXTENDED .18 FEET

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS= 9983.0 10008.0 TYPE= 1 TARGET= 25.000
ET OPTION APPLIED TO LIMIT EFFECTIVE FLOW WITHIN LIMITS OF ARMORED
WEIR LEVEE. TOP OF LEVEE, LEFT AND RIGHT =1631.0
FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
BEYOND EEE. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION

```
        BEYOND EXIT FLOW LIMITS POSSIBLE AND DETENTION REQUIRED PRECEDING
        UPSTREAM OF ROAD.
    12.128      2.47   1631.17   1630.92   1631.15   1631.60       .43       .25       .17   1631.00
     191.0        .0     191.0        .0        .0      36.4        .0      30.8      16.5 100000.00
       .80       .00      5.25       .00      .000      .030      .000      .000   1628.70   9983.00
   .007109       70.       70.       70.        11        11         0       .00     25.00  10008.00


 CCHV=     .100 CEHV=     .300
 *SECNO -1.768
1
   06MAY93      11:36:34                                                                          PAGE   36


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


 START TRIB COMP
     -1.768     1.768  1606.991

 3470 ENCROACHMENT STATIONS=     9961.4   10100.0  TYPE=      1  TARGET=      138.600
        REPEAT THIS SECTION FOR START OF TRIBUTERY TO STRUC. #15.
    -1.768      3.59   1606.99       .00   1606.07   1607.17       .18       .00       .00   1605.40
     532.0        .0     202.4     329.6        .0      46.6     123.7      32.6      17.9   1605.30
       .87       .00      4.34      2.66      .000      .045      .049      .000   1603.40   9961.40
   .006081      790.      820.      770.         0         0         0       .00    138.60  10100.00


 *SECNO 21.890

 3301 HV CHANGED MORE THAN HVINS

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

 3470 ENCROACHMENT STATIONS=    10423.0   10450.0  TYPE=      1  TARGET=       27.000
        BEGIN TRIBUTARY TO STRUC. #15, REDUCE Q TO 252CFS. ADD 20 TO SECTION I.D
        STA. 10435 = TRIB. BASELINE.
    21.890      2.57   1614.27   1614.27   1614.19   1615.05       .79      5.63       .18   1612.50
     282.0      24.7     232.6      24.7       4.6      31.2       4.7      34.1      19.1   1612.60
       .89      5.34      7.44      5.23      .049      .045      .049      .000   1611.70  10423.00
   .028059      615.      615.      615.        20        19         0       .00     27.00  10450.00


 *SECNO 22.016

 3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.07


 3470 ENCROACHMENT STATIONS=    10850.0   10888.0  TYPE=      1  TARGET=       38.000
        STA. 10835 = TRIB. BASELINE.
    22.016      4.06   1622.86       .00   1621.95   1623.25       .39      8.16       .04   1620.60
     282.0      44.5     232.3       5.2      18.4      42.9       2.5      34.9      19.6   1621.10
       .93      2.42      5.41      2.14      .049      .045      .049      .000   1618.80  10850.00
   .006576      650.      690.      660.         7         0         0       .00     38.00  10888.00


 CCHV=     .300 CEHV=     .500
1
   06MAY93      11:36:34                                                                          PAGE   37


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


*SECNO 22.037
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1627.20 ELREA=      1627.20

        BEGIN SUNVALLEY PARKWAY CULVERTS (4-10'X3' CULVERTS- STRUC. #15)
   22.037      1.10   1624.70   1624.70   1624.70   1625.25       .55      1.01       .08   1627.10
    282.0       .0     282.0       .0        .0      47.2        .0      35.1      19.7   1627.10
      .94      .00      5.97       .00      .000      .030      .000      .000   1623.60   9978.50
  .013711     110.      110.      110.        20        14         0       .00     43.00  10021.50



SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    4          .012      .20      2.90       .00      3.00     10.00    158.00     12        3       1624.20   1623.60

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 22.067

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1626.020  EGOC =   1626.049  PCWSE=   1624.698  ELTRD=   1626.800


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.59

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
   1626.02   1626.05       .80       0.      282.     4.110     120.0   1626.80        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1626.80 ELREA=      1626.80

        END CULVERTS
   22.067      1.59   1625.79       .00   1625.79   1626.05       .26       .80       .00   1626.80
    282.0       .0     282.0       .0        .0      68.6        .0      35.3      19.9   1626.80
      .95      .00      4.11       .00      .000      .012      .000      .000   1624.20   9978.50
  .000650     158.      158.      158.         2         0         0       .00     43.00  10021.50


1
   06MAY93      11:36:34                                                                          PAGE   38


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


*SECNO 22.076
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
UPSTREAM OF ROAD.

22.076	.87	1626.87	1626.87	1626.87	1627.26	.39	.09	.06	1627.00
282.0	.0	260.6	21.4	.0	51.1	6.5	35.4	19.9	1626.00
.95	.00	5.10	3.31	.000	.030	.030	.000	1626.00	9971.77
.013514	50.	50.	50.	20	11	0	.00	76.05	10047.82

1

THIS RUN EXECUTED 06MAY93 11:38:43

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH NO. 3 100-YEAR PRO

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	.086	766.00	1511.83	.00	7.15	.00	9952.60	9980.00	9775.20	10317.80	9895.29	9985.62
	.086	766.00	1512.63	.00	6.65	.00	9952.60	9980.00	9952.60	9980.00	9952.60	9980.00
	.209	766.00	1517.09	.00	6.19	675.00	9904.10	9925.60	9808.30	10226.60	9898.17	10062.42
	.209	766.00	1517.89	.00	8.25	675.00	9904.10	9925.60	9904.10	9925.60	9904.10	9925.60
	.355	766.00	1523.88	.00	5.04	800.00	9984.20	10008.70	9660.60	10181.20	9934.47	10144.48
	.355	766.00	1524.89	.00	4.91	800.00	9984.20	10008.70	9971.00	10049.00	9971.00	10049.00
	.499	766.00	1532.65	1532.58	6.05	790.00	9989.90	10018.90	9736.40	10398.20	9965.23	10360.39
*	.499	766.00	1533.29	1533.29	7.96	790.00	9989.90	10018.90	9989.90	10050.81	9989.90	10050.81
	.645	649.00	1540.89	.00	4.49	760.00	9987.20	10014.10	9880.80	10325.90	9896.82	10237.32
	.645	649.00	1541.88	.00	5.14	760.00	9987.20	10014.10	9987.20	10065.60	9987.20	10065.60
	.790	649.00	1549.84	.00	5.55	760.00	10000.10	10021.30	9915.10	10490.30	9956.70	10150.11
*	.790	649.00	1550.41	.00	8.09	760.00	10000.10	10021.30	10000.10	10047.50	10000.10	10047.50
	.938	649.00	1558.50	.00	3.87	785.00	9906.50	9953.60	9725.70	10157.80	9794.44	10154.56
*	.938	649.00	1559.50	.00	4.69	785.00	9906.50	9953.60	9906.50	9969.00	9906.50	9969.00
*	1.084	649.00	1566.33	1566.33	6.17	790.00	9987.40	10012.30	9702.70	10112.50	9826.04	10052.99
*	1.084	649.00	1566.89	.00	8.19	790.00	9987.40	10012.30	9987.40	10022.90	9987.40	10022.90
	1.221	532.00	1574.23	.00	4.26	725.00	9975.10	9998.80	9910.60	10307.40	9920.14	10139.98
	1.221	532.00	1575.19	.00	4.88	725.00	9975.10	9998.80	9940.00	10000.00	9940.00	10000.00
	1.347	532.00	1581.30	.00	5.60	690.00	9988.00	10010.30	9855.60	10271.10	9926.06	10127.09
*	1.347	532.00	1581.83	1581.81	8.05	690.00	9988.00	10010.30	9971.10	10010.30	9971.10	10010.30
	1.484	532.00	1588.63	.00	3.98	790.00	10063.30	10104.70	9578.70	10445.20	10019.58	10252.65
*	1.484	532.00	1589.54	.00	4.43	790.00	10063.30	10104.70	10060.00	10110.00	10060.00	10110.00

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	1.622	532.00	1597.95	1597.95	5.81	760.00	9963.70	9979.90	9895.30	10585.00	9953.45	10302.16
*	1.622	532.00	1598.35	1598.35	8.35	760.00	9963.70	9979.90	9963.70	10004.60	9963.70	10004.60
	1.768	532.00	1606.07	.00	4.46	820.00	9961.40	9980.40	.00	.00	9909.46	10270.06
*	1.768	532.00	1606.99	.00	4.33	820.00	9961.40	9980.40	9961.40	10100.00	9961.40	10100.00
*	1.888	86.00	1613.60	1613.60	4.97	615.00	10074.90	10083.70	9811.20	10153.60	10031.40	10106.86
*	1.888	86.00	1613.81	1613.81	6.86	615.00	10074.90	10083.70	10074.90	10083.70	10074.90	10083.70
*	2.007	86.00	1622.01	.00	3.08	690.00	9970.50	9983.10	9800.10	10017.40	9881.67	9984.52
*	2.007	86.00	1622.88	.00	3.53	690.00	9970.50	9983.10	9970.50	9983.10	9970.50	9983.10
*	2.076	86.00	1626.70	1626.70	4.58	380.00	9952.40	9962.70	9894.00	10046.90	9926.67	10036.87
*	2.076	86.00	1626.99	.00	6.19	380.00	9952.40	9962.70	9952.70	9962.70	9952.70	9962.70
	2.128	86.00	1630.67	.00	4.06	290.00	10003.50	10019.50	.00	.00	9995.90	10042.04
*	2.128	86.00	1631.06	.00	3.43	290.00	10003.50	10019.50	10003.50	10019.50	10003.50	10019.50
*	2.142	86.00	1631.12	.00	1.78	75.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	2.142	86.00	1631.37	.00	1.46	75.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	2.171	86.00	1631.87	.00	2.31	154.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	2.171	86.00	1631.98	.00	2.05	154.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	2.186	86.00	1633.52	1633.52	3.90	80.00	9972.00	10030.00	.00	.00	9976.84	10023.32
*	2.186	86.00	1633.51	1633.51	3.92	80.00	9972.00	10030.00	.00	.00	9976.86	10023.31
	-1.768	532.00	1606.07	.00	4.48	820.00	9961.40	9980.40	.00	.00	9909.48	10270.04
	-1.768	532.00	1606.99	.00	4.34	820.00	9961.40	9980.40	9961.40	10100.00	9961.40	10100.00
*	11.884	171.00	1613.85	1613.85	5.72	615.00	10219.00	10230.60	10153.60	10262.40	10195.94	10254.43
*	11.884	171.00	1614.03	1614.03	7.84	615.00	10219.00	10230.60	10219.00	10230.60	10219.00	10230.60
*	12.000	171.00	1621.23	.00	4.26	690.00	10270.20	10278.60	10017.40	10355.70	10213.69	10342.31
*	12.000	171.00	1622.17	.00	4.65	690.00	10270.20	10278.60	10263.00	10287.00	10263.00	10287.00
*	12.063	171.00	1625.46	.00	4.13	380.00	10426.60	10440.50	10046.90	10580.00	10332.51	10468.49
*	12.063	171.00	1626.12	1626.12	6.77	380.00	10426.60	10440.50	10420.00	10442.00	10420.00	10442.00
*	12.089	171.00	1629.48	1629.48	8.21	135.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	12.089	171.00	1629.47	1629.47	8.26	135.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	12.115	191.00	1630.22	.00	7.86	138.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	12.115	191.00	1630.18	.00	7.99	138.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	12.128	191.00	1631.15	1630.92	5.31	70.00	9983.00	10008.00	9983.00	10008.00	9983.00	10008.00
*	12.128	191.00	1631.17	1630.92	5.25	70.00	9983.00	10008.00	9983.00	10008.00	9983.00	10008.00
	-1.768	532.00	1606.07	.00	4.48	820.00	9961.40	9980.40	.00	.00	9909.48	10270.04
	-1.768	532.00	1606.99	.00	4.34	820.00	9961.40	9980.40	9961.40	10100.00	9961.40	10100.00

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	21.890	282.00	1614.19	1614.19	5.42	615.00	10426.90	10446.70	10365.50	10572.20	10385.48	10512.20
*	21.890	282.00	1614.27	1614.27	7.44	615.00	10426.90	10446.70	10423.00	10450.00	10423.00	10450.00

	22.016	282.00	1621.95	.00	4.83	690.00	10872.00	10886.50	10722.70	10961.70	10735.18	10891.45
*	22.016	282.00	1622.86	.00	5.41	690.00	10872.00	10886.50	10850.00	10888.00	10850.00	10888.00
*	22.037	282.00	1624.70	1624.70	5.98	110.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	22.037	282.00	1624.70	1624.70	5.97	110.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	22.067	282.00	1625.79	.00	4.11	158.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	22.067	282.00	1625.79	.00	4.11	158.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	22.076	282.00	1626.87	1626.87	5.10	50.00	9971.00	10033.00	.00	.00	9971.77	10047.82
*	22.076	282.00	1626.87	1626.87	5.10	50.00	9971.00	10033.00	.00	.00	9971.77	10047.82

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WASH NO. 3 100-YEAR PRO

SUMMARY PRINTOUT

	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	.086	94.68	666.99	4.33	2.33	7.15	1.66	1513.30	1511.83	.00	90.33	1507.20	1.44
	.086	.00	766.00	.00	.00	6.65	.00	1513.30	1512.63	.00	27.40	1507.20	1.00
	.209	5.74	468.46	291.80	1.78	6.19	2.49	1521.70	1517.09	5.26	164.25	1512.20	1.69
	.209	.00	766.00	.00	.00	8.25	.00	1521.70	1517.89	5.26	21.50	1512.20	1.00
	.355	100.31	230.80	434.89	2.89	5.04	3.74	1528.10	1523.88	6.79	210.01	1519.70	1.10
	.355	58.09	345.62	362.29	2.96	4.91	4.18	1528.10	1524.89	7.00	78.00	1519.70	1.05
	.499	4.64	405.12	356.24	1.20	6.05	2.69	1535.80	1532.65	8.77	269.89	1528.80	1.60
*	.499	.00	680.90	85.10	.00	7.96	3.24	1535.80	1533.29	8.40	60.91	1528.80	1.22
	.645	232.97	203.91	212.11	2.98	4.49	2.06	1542.40	1540.89	8.24	340.50	1538.10	1.33
	.645	.00	370.02	278.97	.00	5.14	3.46	1542.40	1541.88	8.59	78.40	1538.10	1.12
	.790	84.39	189.77	374.83	3.31	5.55	3.59	1549.90	1549.84	8.95	186.66	1546.10	1.14
*	.790	.00	375.24	273.76	.00	8.09	6.51	1549.90	1550.41	8.54	47.40	1546.10	1.03
	.938	116.03	275.12	257.84	2.40	3.87	2.08	1559.60	1558.50	8.67	350.24	1556.10	1.28
*	.938	.00	552.79	96.21	.00	4.69	3.39	1559.60	1559.50	9.09	62.50	1556.10	1.04
*	1.084	228.78	342.82	77.39	2.81	6.17	2.84	1570.30	1566.33	7.83	206.42	1563.60	1.53
*	1.084	.00	568.48	80.52	.00	8.19	5.16	1570.30	1566.89	7.39	35.50	1563.60	1.06
	1.221	102.29	167.32	262.39	2.52	4.26	2.48	1577.70	1574.23	7.90	219.84	1571.50	1.21
	1.221	225.74	302.27	3.99	3.53	4.88	1.81	1577.70	1575.19	8.30	60.00	1571.50	1.09
	1.347	70.18	241.00	220.82	2.44	5.60	2.78	1585.60	1581.30	7.07	191.14	1578.30	1.47
*	1.347	89.99	442.01	.00	4.62	8.05	.00	1585.60	1581.83	6.64	39.20	1578.30	1.12
	1.484	26.25	280.43	225.31	1.94	3.98	2.42	1592.00	1588.63	7.33	211.97	1585.90	1.22
*	1.484	18.00	480.15	33.84	2.60	4.43	3.18	1592.00	1589.54	7.70	50.00	1585.90	1.04
*	1.622	15.43	232.02	284.54	2.51	5.81	2.22	1601.40	1597.95	9.32	307.34	1594.90	1.88
*	1.622	.00	387.80	144.20	.00	8.35	4.80	1601.40	1598.35	8.82	40.90	1594.90	1.18
	1.768	28.66	130.36	372.98	1.87	4.46	3.01	1608.70	1606.07	8.12	250.21	1603.40	1.14
*	1.768	.00	202.14	329.86	.00	4.33	2.66	1608.70	1606.99	8.64	138.60	1603.40	1.19
*	1.888	27.86	53.13	5.01	2.55	4.97	1.71	1614.00	1613.60	7.53	50.44	1611.70	1.43
*	1.888	.00	86.00	.00	.00	6.86	.00	1614.00	1613.81	6.82	8.80	1611.70	1.00
*	2.007	45.22	40.62	.16	1.80	3.08	.77	1622.10	1622.01	8.40	90.24	1618.80	1.24

*	2.007	.00	86.00	.00	.00	3.53	.00	1622.10	1622.88	9.07	12.60	1618.80	1.00
*	2.076	23.98	50.51	11.51	2.62	4.58	2.06	1627.00	1626.70	4.70	61.97	1624.00	1.33
*	2.076	.00	86.00	.00	.00	6.19	.00	1627.00	1626.99	4.11	10.00	1624.00	1.00

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	2.128	6.25	76.68	3.08	1.97	4.06	.96	1633.10	1630.67	3.97	45.11	1628.80	1.29
*	2.128	.00	86.00	.00	.00	3.43	.00	1633.10	1631.06	4.07	16.00	1628.80	1.00
*	2.142	.00	86.00	.00	.00	1.78	.00	1635.00	1631.12	.45	43.00	1630.00	1.00
*	2.142	.00	86.00	.00	.00	1.46	.00	1635.00	1631.37	.31	43.00	1630.00	1.00
*	2.171	.00	86.00	.00	.00	2.31	.00	1635.00	1631.87	.75	43.00	1631.00	1.00
*	2.171	.00	86.00	.00	.00	2.05	.00	1635.00	1631.98	.61	43.00	1631.00	1.00
*	2.186	.00	86.00	.00	.00	3.90	.00	1634.00	1633.52	1.65	46.48	1633.00	1.00
*	2.186	.00	86.00	.00	.00	3.92	.00	1634.00	1633.51	1.54	46.45	1633.00	1.00
	-1.768	28.47	130.72	372.81	1.88	4.48	3.03	1608.70	1606.07	-27.44	249.79	1603.40	1.14
	-1.768	.00	202.43	329.57	.00	4.34	2.66	1608.70	1606.99	-26.52	138.60	1603.40	1.19
*	11.884	51.21	112.93	6.86	3.38	5.72	1.44	1614.00	1613.85	7.78	57.17	1611.70	1.35
*	11.884	.00	171.00	.00	.00	7.84	.00	1614.00	1614.03	7.04	11.60	1611.70	1.00
*	12.000	100.47	67.18	3.34	2.42	4.26	1.66	1622.10	1621.23	7.38	70.31	1618.80	1.28
*	12.000	39.75	110.14	21.11	2.99	4.65	2.41	1622.10	1622.17	8.14	24.00	1618.80	1.19
*	12.063	92.23	55.02	23.75	2.86	4.13	2.24	1627.00	1625.46	4.23	108.76	1624.00	1.14
*	12.063	14.81	151.26	4.92	3.39	6.77	3.28	1627.00	1626.12	3.95	22.00	1624.00	1.14
*	12.089	.00	171.00	.00	.00	8.21	.00	1630.80	1629.48	4.02	10.00	1627.40	1.00
*	12.089	.00	171.00	.00	.00	8.26	.00	1630.80	1629.47	3.36	10.00	1627.40	1.00
*	12.115	.00	191.00	.00	.00	7.86	.00	1631.00	1630.22	.74	10.00	1627.80	1.00
*	12.115	.00	191.00	.00	.00	7.99	.00	1631.00	1630.18	.71	10.00	1627.80	1.00
*	12.128	.00	191.00	.00	.00	5.31	.00	1631.00	1631.15	.93	25.00	1628.70	1.00
*	12.128	.00	191.00	.00	.00	5.25	.00	1631.00	1631.17	.99	25.00	1628.70	1.00
	-1.768	28.47	130.72	372.81	1.88	4.48	3.03	1608.70	1606.07	-25.08	249.79	1603.40	1.14
	-1.768	.00	202.43	329.57	.00	4.34	2.66	1608.70	1606.99	-24.18	138.60	1603.40	1.19
*	21.890	44.17	161.18	76.65	2.85	5.42	2.73	1615.90	1614.19	8.12	121.42	1611.70	1.36
*	21.890	24.69	232.57	24.74	5.34	7.44	5.23	1615.90	1614.27	7.27	27.00	1611.70	1.05
	22.016	135.38	143.31	3.31	2.75	4.83	1.57	1623.30	1621.95	7.76	108.21	1618.80	1.28
*	22.016	44.48	232.28	5.24	2.42	5.41	2.14	1623.30	1622.86	8.60	38.00	1618.80	1.28
*	22.037	.00	282.00	.00	.00	5.98	.00	1627.10	1624.70	2.75	43.00	1623.60	1.00
*	22.037	.00	282.00	.00	.00	5.97	.00	1627.10	1624.70	1.84	43.00	1623.60	1.00
*	22.067	.00	282.00	.00	.00	4.11	.00	1626.80	1625.79	1.09	43.00	1624.20	1.00
*	22.067	.00	282.00	.00	.00	4.11	.00	1626.80	1625.79	1.09	43.00	1624.20	1.00
*	22.076	.00	260.64	21.36	.00	5.10	3.31	1627.00	1626.87	1.08	76.05	1626.00	1.04
*	22.076	.00	260.64	21.36	.00	5.10	3.31	1627.00	1626.87	1.08	76.05	1626.00	1.04

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WASH NO. 3 100-YEAR PRO

SUMMARY PRINTOUT

	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	.086	.00	.00	1512.53	.70	.00	.00	84.86	.00	4.63	49.00	42.00	49.00
	.086	.00	.00	1513.32	.69	.00	.00	65.14	.00	5.43	.00	42.00	.00
	.209	675.00	7.41	1517.49	.40	4.93	.03	64.69	2.53	4.89	49.00	42.00	49.00
	.209	675.00	7.41	1518.95	1.06	5.52	.11	105.62	1.61	5.69	.00	42.00	.00
	.355	800.00	9.38	1524.14	.26	6.63	.01	110.61	6.12	4.18	49.00	45.00	49.00
	.355	800.00	9.38	1525.19	.31	6.17	.07	58.98	4.08	5.19	49.00	45.00	49.00
	.499	790.00	11.52	1533.00	.35	8.83	.03	116.09	9.69	3.85	49.00	45.00	49.00
*	.499	790.00	11.52	1534.18	.89	7.04	.18	152.99	6.67	4.49	.00	45.00	49.00
	.645	760.00	12.24	1541.06	.17	8.04	.02	95.39	13.44	2.79	49.00	45.00	49.00
	.645	760.00	12.24	1542.19	.31	7.95	.06	72.61	8.97	3.78	.00	45.00	49.00
	.790	760.00	10.53	1550.11	.28	9.02	.03	154.85	16.81	3.74	49.00	45.00	49.00
*	.790	760.00	10.53	1551.28	.87	8.92	.17	228.32	11.04	4.31	.00	45.00	49.00
	.938	785.00	12.74	1558.64	.14	8.52	.01	81.95	20.43	2.40	49.00	45.00	49.00
*	.938	785.00	12.74	1559.82	.32	8.48	.05	63.30	13.14	3.40	.00	45.00	49.00
*	1.084	790.00	9.49	1566.70	.37	7.86	.07	125.93	24.08	2.73	49.00	45.00	49.00
*	1.084	790.00	9.49	1567.85	.96	7.84	.19	179.97	15.23	3.29	.00	45.00	49.00
	1.221	725.00	10.90	1574.39	.15	7.66	.02	88.42	26.96	2.73	49.00	45.00	49.00
	1.221	725.00	10.90	1575.48	.29	7.57	.07	62.92	16.99	3.69	49.00	45.00	49.00
	1.347	690.00	9.86	1581.59	.28	7.16	.04	123.54	29.63	3.00	49.00	45.00	49.00
*	1.347	690.00	9.86	1582.73	.89	7.06	.18	194.95	18.60	3.53	49.00	45.00	.00
	1.484	790.00	9.62	1588.80	.17	7.21	.01	73.08	32.51	2.73	49.00	45.00	49.00
*	1.484	790.00	9.62	1589.83	.29	7.04	.06	51.16	20.40	3.64	49.00	45.00	49.00
*	1.622	760.00	11.84	1598.22	.27	6.50	.03	96.38	35.67	3.05	49.00	45.00	49.00
*	1.622	760.00	11.84	1599.24	.89	6.78	.18	188.63	22.18	3.45	.00	45.00	49.00
	1.768	820.00	10.37	1606.25	.18	8.02	.01	107.60	38.75	2.67	49.00	45.00	49.00
*	1.768	820.00	10.37	1607.17	.18	7.86	.07	60.39	24.42	3.59	.00	45.00	49.00
*	1.888	615.00	13.50	1613.87	.27	7.11	.03	193.93	40.11	1.90	49.00	45.00	49.00
*	1.888	615.00	13.50	1614.54	.73	4.39	.17	341.61	25.72	2.11	.00	45.00	.00
*	2.007	690.00	10.29	1622.10	.10	8.21	.02	83.94	40.59	3.21	49.00	45.00	49.00
*	2.007	690.00	10.29	1623.07	.19	8.47	.05	62.63	26.01	4.08	.00	45.00	.00
*	2.076	380.00	13.68	1626.93	.23	4.58	.04	185.55	40.87	2.70	49.00	45.00	49.00
*	2.076	380.00	13.68	1627.59	.59	4.39	.12	281.21	26.18	2.99	.00	45.00	.00

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	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	2.128	290.00	16.55	1630.90	.23	3.97	.00	124.71	41.01	1.87	49.00	45.00	49.00
*	2.128	290.00	16.55	1631.25	.18	3.62	.04	70.18	26.31	2.26	.00	45.00	.00
*	2.142	75.00	16.00	1631.17	.05	.21	.05	11.86	41.08	1.12	.00	30.00	.00
*	2.142	75.00	16.00	1631.40	.03	.11	.05	6.19	26.38	1.37	.00	30.00	.00

*	2.171	154.00	6.49	1631.95	.08	.78	.00	4.43	41.23	.87	.00	12.00	.00
*	2.171	154.00	6.49	1632.04	.06	.64	.00	2.98	26.56	.98	.00	12.00	.00
*	2.186	80.00	25.00	1633.75	.24	.10	.08	168.28	41.28	.52	.00	30.00	.00
*	2.186	80.00	25.00	1633.75	.24	.07	.09	170.61	26.62	.51	.00	30.00	.00
	-1.768	820.00	.00	1606.25	.18	.00	.00	109.18	42.99	2.67	49.00	45.00	49.00
	-1.768	820.00	.00	1607.17	.18	.00	.00	60.81	28.35	3.59	.00	45.00	49.00
*	11.884	615.00	13.50	1614.24	.39	7.27	.06	154.49	44.45	2.15	49.00	45.00	49.00
*	11.884	615.00	13.50	1614.98	.95	5.02	.23	317.05	29.71	2.33	.00	45.00	.00
*	12.000	690.00	10.29	1621.40	.16	7.13	.02	77.53	45.20	2.43	49.00	45.00	49.00
*	12.000	690.00	10.29	1622.43	.26	7.38	.07	53.79	30.24	3.37	49.00	45.00	49.00
*	12.063	380.00	13.68	1625.63	.16	4.23	.00	170.32	45.71	1.46	49.00	45.00	49.00
*	12.063	380.00	13.68	1626.77	.65	3.72	.12	229.46	30.56	2.12	49.00	45.00	49.00
*	12.089	135.00	25.19	1630.53	1.05	2.26	.44	164.46	45.83	2.08	.00	30.00	.00
*	12.089	135.00	25.19	1630.53	1.06	2.63	.20	167.16	30.64	2.07	.00	30.00	.00
*	12.115	138.00	2.90	1631.18	.96	.65	.00	20.91	45.90	2.42	.00	12.00	.00
*	12.115	138.00	2.90	1631.17	.99	.64	.00	21.91	30.71	2.38	.00	12.00	.00
*	12.128	70.00	12.86	1631.59	.44	.25	.16	73.69	45.95	2.45	.00	30.00	.00
*	12.128	70.00	12.86	1631.60	.43	.25	.17	71.09	30.76	2.47	.00	30.00	.00
	-1.768	820.00	.00	1606.25	.18	.00	.00	109.18	47.79	2.67	49.00	45.00	49.00
	-1.768	820.00	.00	1607.17	.18	.00	.00	60.81	32.63	3.59	.00	45.00	49.00
*	21.890	615.00	13.50	1614.50	.31	7.59	.04	159.23	49.49	2.49	49.00	45.00	49.00
*	21.890	615.00	13.50	1615.05	.79	5.63	.18	280.59	34.12	2.57	49.00	45.00	49.00
	22.016	690.00	10.29	1622.19	.24	7.68	.01	85.84	50.67	3.15	49.00	45.00	49.00
*	22.016	690.00	10.29	1623.25	.39	8.16	.04	65.76	34.93	4.06	49.00	45.00	49.00
*	22.037	110.00	43.64	1625.25	.55	1.18	.16	137.36	50.83	1.10	.00	30.00	.00
*	22.037	110.00	43.64	1625.25	.55	1.01	.08	137.11	35.07	1.10	.00	30.00	.00
*	22.067	158.00	3.80	1626.05	.26	.80	.00	6.50	51.04	1.59	.00	12.00	.00
*	22.067	158.00	3.80	1626.05	.26	.80	.00	6.50	35.28	1.59	.00	12.00	.00
*	22.076	50.00	36.00	1627.26	.39	.09	.06	135.14	51.11	.87	.00	30.00	30.00
*	22.076	50.00	36.00	1627.26	.39	.09	.06	135.14	35.35	.87	.00	30.00	30.00

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SUMMARY OF ERRORS AND SPECIAL NOTES

CAUTION SECNO= .499 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= .499 PROFILE= 2 MINIMUM SPECIFIC ENERGY

WARNING SECNO= .790 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= .938 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 1.084 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1.084 PROFILE= 1 MINIMUM SPECIFIC ENERGY
WARNING SECNO= 1.084 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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WARNING SECNO=      1.347  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      1.484  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      1.622  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      1.622  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      1.622  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      1.622  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      1.768  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      1.888  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      1.888  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      1.888  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      1.888  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      1.888  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      2.007  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      2.007  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      2.076  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.076  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=      2.076  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      2.128  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      2.142  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      2.142  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      2.171  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      2.171  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      2.186  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.186  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.186  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=      2.186  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.186  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.186  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     11.884  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     11.884  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     11.884  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.884  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     11.884  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     12.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     12.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     12.063  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     12.063  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.063  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     12.089  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.089  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     12.089  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.089  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     12.115  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     12.115  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     12.128  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     12.128  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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CAUTION SECNO=     21.890  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     21.890  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     21.890  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     21.890  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     21.890  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     22.016  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     22.037  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.037  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.037  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     22.037  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.037  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.037  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     22.067  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.067  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     22.076  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.076  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.076  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     22.076  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.076  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.076  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

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FLOODWAY DATA, WASH NO. 3 100-YEAR PRO
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.086	27.	115.	6.6	1512.6	1511.8	.8
.209	21.	93.	8.3	1517.9	1517.1	.8
.355	78.	177.	4.3	1524.9	1523.9	1.0
.499	61.	112.	6.9	1533.2	1532.6	.6
.645	78.	153.	4.3	1541.9	1540.9	1.0
.790	47.	88.	7.3	1550.4	1549.8	.6
.938	62.	146.	4.4	1559.5	1558.5	1.0
1.084	35.	85.	7.6	1566.9	1566.3	.6
1.221	60.	128.	4.2	1575.2	1574.2	1.0
1.347	39.	74.	7.2	1581.8	1581.3	.5
1.484	50.	126.	4.2	1589.5	1588.6	.9
1.622	41.	76.	7.0	1598.4	1598.0	.4
1.768	139.	171.	3.1	1607.0	1606.1	.9
1.888	9.	13.	6.9	1613.8	1613.6	.2
2.007	13.	24.	3.5	1622.9	1622.0	.9
2.076	10.	14.	6.2	1627.0	1626.7	.3
2.128	16.	25.	3.4	1631.1	1630.7	.4
2.142	43.	59.	1.5	1631.4	1631.1	.3
2.171	43.	42.	2.0	1632.0	1631.9	.1
2.186	46.	22.	3.9	1633.5	1633.5	.0
-1.768	139.	170.	3.1	1607.0	1606.1	.9
11.884	12.	22.	7.8	1614.1	1613.9	.2
12.000	24.	46.	3.7	1622.1	1621.2	.9
12.063	22.	28.	6.1	1626.2	1625.5	.7
12.089	10.	21.	8.3	1629.5	1629.5	.0
12.115	10.	24.	8.0	1630.2	1630.2	.0

12.128	25.	36.	5.2	1631.2	1631.2	.0
-1.768	139.	170.	3.1	1607.0	1606.1	.9
21.890	27.	41.	6.9	1614.3	1614.2	.1
22.016	38.	64.	4.4	1622.9	1622.0	.9
22.037	43.	47.	6.0	1624.7	1624.7	.0
22.067	43.	69.	4.1	1625.8	1625.8	.0
22.076	76.	58.	4.9	1626.9	1626.9	.0

```
1*****************************************
* HEC-2 WATER SURFACE PROFILES           *
*                                        *
* Version   4.6.0;  February 1991        *
*                                        *
* RUN DATE    06MAY93    TIME   11:42:09 *
*****************************************
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*************************************
* U.S. ARMY CORPS OF ENGINEERS      *
* HYDROLOGIC ENGINEERING CENTER     *
* 609 SECOND STREET, SUITE D        *
* DAVIS, CALIFORNIA 95616-4687      *
*         (916) 756-1104            *
*************************************
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X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                 X
X     X  X        X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
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06MAY93 11:42:09 PAGE 1

THIS RUN EXECUTED 06MAY93 11:42:09

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

 Version   4.6.0;  February 1991
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T1      SUN VALLEY PARKWAY NORTH FIS   CONTRACT:FCDMC NO. 90-04   FILE:WASH4-B
T2      100-YEAR WATER SURFACE PROFILE                    A-N WEST INC.PHX.AZ.
T3      WASH NO.4  100-YEAR PROFILE                DATE:6\17\91;REV. 8\12\91

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2                         .008                                1476.5

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1                 -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       43        1        2       26       39       21       22       27       28
    53       54        0       38       13       14       15       55       26       56
    63        1       51        4       42       57        0       38       39       33
     3       10       11       12        5        7        8       16       17       18
     0      200

NC    .049     .049     .042       .1       .3
QT       2     2275     2275
ET                      9.1                                                 9810     10163
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FLOODWAY MODEL USING FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
PREVIOUS FLOODWAY ANALYSIS BY EQUAL CONVEYANCE REDUCTION (METHOD 4).
STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD FOR
PROFILE 1. PROFILE 2 STARTING WSEL FORCE FED.
CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
CONFLUENCE WITH WASH 5 WEST ALONG BASELINE. TRIBUTARIES TO WASH #4
HAVE SECTION I.D.S.INCREASING UPSTREAM FROM WASH #4 CONFLUENCE WITH
WHOLE NUMBER IN FACTOR OF 10 ADDED TO I.D. AS NOTED AT START OF TRIB.
CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.

X1	0.1591	38	9900.5	9937.3	0	0	0			
GR	1476.6	9364.1	1475.9	9393.6	1475.9	9417.7	1475.2	9423.6	1475.8	9429.4
GR	1475.3	9490.1	1476.2	9574.7	1475.7	9644.6	1475.4	9714.0	1475.8	9775.8
GR	1475.4	9820.0	1475.7	9847.6	1475.2	9853.5	1475.8	9857.4	1475.8	9900.5
GR	1474.8	9906.2	1476.2	9915.2	1475.1	9926.2	1474.8	9931.1	1475.8	9937.3

1

GR	1475.5	9958.7	1475.3	9981.7	1476.4	10000.0	1476.1	10000.1	1475.9	10032.1
GR	1476.1	10083.7	1476.5	10140.3	1476.1	10203.0	1475.2	10245.9	1475.2	10316.6
GR	1474.4	10343.2	1474.7	10356.9	1475.4	10368.1	1475.8	10416.4	1476.3	10476.8
GR	1476.2	10544.7	1476.8	10623.0	1477.6	10671.8				
ET			9.1						9700	10230
X1	.2727	52	10000.0	10047.0	680	620	630			
GR	1482.6	7931.3	1481.9	7987.8	1481.2	8045.5	1481.2	8118.2	1481.5	8184.6
GR	1481.3	8262.7	1481.1	8383.0	1480.6	8442.1	1479.6	8453.1	1480.9	8466.2
GR	1480.8	8498.1	1480.2	8590.0	1480.3	8617.6	1479.8	8641.8	1480.6	8673.1
GR	1480.6	8758.5	1479.6	8778.9	1480.6	8835.1	1480.1	8897.9	1479.8	8967.6
GR	1480.9	9072.0	1480.7	9159.6	1481.1	9215.7	1481.4	9295.2	1481.4	9351.0
GR	1481.8	9400.8	1481.7	9451.4	1480.8	9509.5	1480.5	9534.2	1480.8	9578.8
GR	1481.5	9667.5	1481.1	9749.4	1480.8	9860.3	1480.4	9904.0	1480.6	9917.9
GR	1480.2	9933.0	1480.5	9992.4	1480.9	10000.0	1480.4	10000.1	1479.4	10020.3
GR	1479.2	10032.7	1481.2	10047.0	1479.5	10059.3	1480.3	10089.7	1480.0	10097.6
GR	1480.1	10152.9	1480.6	10201.9	1479.7	10215.5	1480.8	10226.2	1480.9	10269.4
GR	1481.2	10339.1	1481.9	10378.3						
ET			9.1						9950	10230
X1	.4166	65	9981.0	10011.1	710	725	750			
GR	1489.3	8260.5	1488.8	8346.6	1488.7	8551.5	1488.9	8604.6	1487.6	8662.7
GR	1487.8	8685.4	1484.5	8698.6	1484.4	8707.2	1487.6	8716.8	1485.5	8724.5
GR	1487.9	8730.3	1487.9	8785.5	1488.1	8859.3	1487.8	8958.9	1487.6	9018.2
GR	1485.0	9029.2	1484.6	9036.0	1488.0	9050.3	1488.4	9075.0	1488.4	9148.6
GR	1488.6	9192.4	1488.9	9251.7	1488.9	9317.8	1488.5	9415.4	1488.6	9490.1
GR	1488.5	9621.8	1488.4	9630.5	1485.6	9638.8	1488.8	9645.5	1488.6	9699.4
GR	1488.5	9796.1	1488.5	9854.9	1487.6	9912.5	1487.5	9974.2	1484.7	9981.0
GR	1485.1	9994.6	1484.4	10000.0	1484.0	10000.1	1484.0	10007.0	1487.8	10011.1
GR	1487.4	10024.4	1486.1	10032.1	1486.9	10045.4	1485.8	10058.0	1486.2	10065.5
GR	1487.5	10075.0	1487.9	10109.1	1487.2	10191.8	1486.9	10215.9	1485.2	10222.0
GR	1486.5	10230.0	1483.9	10242.3	1487.1	10250.7	1486.7	10315.6	1485.8	10351.4
GR	1487.4	10362.1	1486.8	10389.1	1485.7	10394.9	1487.1	10398.3	1485.8	10405.3
GR	1486.5	10409.5	1487.1	10459.2	1487.3	10521.5	1487.9	10571.6	1489.0	10607.6
ET			9.1						9900	10140.0
X1	.5644	58	10086.0	10133.7	575	590	585			
GR	1494.0	8288.7	1493.6	8350.9	1494.0	8453.5	1493.8	8532.7	1494.0	8621.9
GR	1494.1	8682.4	1494.2	8784.9	1492.8	8889.4	1491.7	8900.2	1492.9	8905.1
GR	1492.2	8923.8	1489.5	8929.9	1488.7	8934.6	1492.7	8938.9	1492.6	8973.6
GR	1491.8	8979.8	1492.7	8985.6	1492.6	9050.9	1494.1	9109.0	1494.4	9169.9
GR	1494.5	9245.0	1494.4	9332.3	1493.8	9426.4	1491.2	9431.4	1491.5	9436.4
GR	1493.0	9443.7	1494.3	9457.5	1494.0	9515.7	1494.4	9583.2	1494.4	9647.6
GR	1494.3	9707.8	1493.4	9711.9	1493.5	9725.3	1494.4	9728.1	1494.0	9788.8
GR	1492.4	9797.0	1493.7	9805.4	1494.2	9867.3	1494.3	9872.4	1494.4	9941.5
GR	1493.9	10000.0	1493.8	10000.1	1493.5	10037.9	1492.6	10050.3	1492.3	10067.3
GR	1490.9	10077.4	1492.2	10086.0	1487.6	10099.6	1488.6	10110.8	1493.0	10133.7

GR	1493.2	10234.0	1493.1	10309.4	1493.1	10329.3	1490.5	10337.8	1492.9	10344.2
GR	1493.5	10377.1	1493.5	10440.0	1493.8	10503.3				

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ET		7.1	9.1				9281.8	10571.3	9906	10195.2
X1	.6894	68	10118.3	10195.2	680	710	710			
GR	1500.4	8592.8	1500.3	8652.3	1500.0	8736.9	1500.0	8803.4	1500.2	8881.5
GR	1500.1	8962.1	1500.2	9045.7	1499.9	9114.0	1499.7	9136.5	1499.8	9148.0
GR	1499.7	9214.3	1499.9	9280.3	1500.3	9281.8	1500.3	9281.9	1500.2	9325.8
GR	1500.0	9358.3	1497.3	9373.0	1499.8	9379.8	1500.0	9403.8	1500.2	9461.1
GR	1500.4	9518.8	1500.5	9569.4	1500.7	9623.0	1500.8	9679.1	1500.8	9732.7
GR	1500.1	9751.2	1499.6	9764.7	1500.7	9787.4	1499.9	9795.7	1498.1	9799.9
GR	1499.6	9803.6	1499.5	9818.7	1500.6	9865.4	1499.9	9872.6	1500.4	9877.3
GR	1500.1	9904.7	1499.0	9936.0	1498.0	9941.9	1498.0	9946.3	1500.2	9992.4
GR	1499.5	10000.0	1499.9	10000.1	1500.4	10021.2	1500.3	10068.0	1499.8	10118.3
GR	1498.9	10154.5	1494.8	10162.4	1497.9	10168.7	1498.3	10179.7	1498.2	10188.0
GR	1498.9	10195.2	1498.1	10209.7	1498.6	10217.8	1498.7	10229.0	1498.7	10239.3
GR	1498.2	10255.7	1499.5	10291.2	1499.5	10326.4	1499.5	10374.9	1499.8	10433.1
GR	1500.1	10479.3	1499.8	10512.5	1497.0	10519.2	1499.7	10523.9	1499.9	10535.3
GR	1500.4	10571.0	1500.6	10630.6	1501.3	10647.3				

ET		7.1	9.1				9085.4	10671.2	9924.2	10223
X1	.7955	78	9961.7	10024.0	500	600	650			
GR	1508.0	8735.0	1508.0	8783.5	1507.6	8832.6	1506.9	8868.3	1506.2	8910.4
GR	1506.1	8946.7	1506.0	9002.5	1506.0	9029.0	1506.2	9085.4	1506.0	9145.7
GR	1505.0	9204.7	1504.9	9245.1	1504.9	9258.2	1505.1	9260.6	1504.9	9271.5
GR	1504.8	9283.2	1504.8	9292.5	1504.8	9299.3	1504.7	9303.1	1505.7	9336.9
GR	1505.9	9348.0	1506.2	9402.3	1506.2	9468.0	1506.5	9522.1	1506.3	9545.8
GR	1506.2	9583.5	1506.4	9614.1	1506.3	9657.6	1506.0	9716.0	1506.1	9742.5
GR	1504.7	9751.2	1506.0	9756.8	1506.1	9788.9	1505.9	9819.0	1506.1	9864.7
GR	1506.1	9897.0	1505.9	9939.3	1505.9	9961.7	1503.2	9971.3	1504.4	9975.2
GR	1504.8	9981.3	1503.5	9988.2	1505.1	9993.4	1505.2	10000.0	1505.3	10000.1
GR	1505.1	10012.7	1503.8	10019.6	1505.9	10024.0	1505.8	10043.2	1505.6	10070.7
GR	1505.6	10093.4	1505.5	10138.8	1505.6	10154.0	1505.2	10184.1	1505.0	10197.9
GR	1503.8	10202.1	1505.2	10205.1	1505.0	10211.2	1503.7	10214.6	1504.8	10218.7
GR	1505.2	10247.7	1505.1	10266.0	1505.0	10315.2	1505.0	10361.6	1504.9	10404.3
GR	1505.1	10452.4	1505.4	10506.3	1505.4	10561.4	1506.0	10607.0	1506.2	10671.2
GR	1505.9	10724.7	1505.9	10741.9	1503.4	10749.5	1506.1	10755.3	1505.6	10781.1
GR	1506.2	10815.2	1507.1	10862.8	1507.6	10895.1				

ET		7.1	9.1				9518.4	10714.2	9908.2	10325.0
X1	.9167	82	9908.2	10000.0	670	625	730			
GR	1514.5	9023.5	1514.3	9058.4	1514.2	9098.8	1514.0	9135.2	1513.8	9180.1
GR	1513.2	9229.0	1512.9	9270.3	1512.5	9321.6	1512.4	9366.6	1512.6	9416.2
GR	1512.4	9457.9	1512.6	9490.4	1512.6	9518.4	1512.3	9545.9	1512.2	9576.8
GR	1512.5	9601.2	1511.9	9614.5	1512.2	9629.0	1512.0	9647.0	1512.5	9655.0
GR	1512.4	9658.8	1512.9	9672.1	1512.3	9695.7	1512.7	9723.0	1512.8	9750.3
GR	1512.2	9771.4	1512.5	9794.3	1511.9	9821.0	1513.2	9827.2	1513.4	9852.2
GR	1512.4	9877.6	1512.5	9900.1	1512.2	9908.2	1510.5	9915.7	1510.8	9920.5
GR	1512.4	9926.6	1512.4	9942.5	1512.4	9989.8	1513.0	10000.0	1512.4	10000.1
GR	1512.4	10021.1	1512.3	10072.4	1512.1	10119.7	1512.0	10156.1	1511.7	10187.4
GR	1511.7	10210.4	1511.6	10218.4	1510.5	10223.3	1510.9	10232.9	1510.8	10258.1
GR	1510.8	10274.8	1511.2	10285.1	1510.9	10293.9	1509.8	10301.6	1511.4	10307.4
GR	1511.4	10331.9	1511.1	10372.6	1510.8	10400.6	1510.3	10432.2	1510.2	10443.5
GR	1510.6	10458.2	1510.9	10484.7	1511.0	10512.1	1510.8	10554.4	1510.8	10593.4
GR	1511.1	10631.7	1511.1	10641.5	1511.4	10648.4	1511.3	10657.1	1512.1	10688.8
GR	1512.6	10714.2	1512.6	10743.9	1512.4	10785.1	1512.6	10832.9	1512.1	10875.2

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GR	1512.0	10912.4	1511.9	10932.7	1510.3	10940.4	1512.6	10946.8	1512.8	10986.7
GR	1512.4	11002.7	1512.8	11008.5						

ET		7.1	9.1				9631.4	10587.3	9962.5	10239.8
X1	1.0379	90	9962.5	10000.1	680	680	705			
GR	1520.4	9194.4	1520.0	9228.2	1520.4	9255.6	1520.4	9292.8	1519.9	9322.7
GR	1519.9	9343.5	1519.8	9367.3	1519.8	9402.3	1519.3	9435.3	1519.0	9472.2
GR	1519.1	9503.4	1519.1	9536.6	1519.1	9559.6	1519.0	9579.6	1519.1	9609.0
GR	1519.7	9631.4	1518.9	9655.8	1519.0	9672.9	1518.6	9694.6	1518.3	9725.0
GR	1518.9	9761.0	1518.9	9793.7	1518.1	9828.8	1518.2	9857.6	1518.5	9887.0
GR	1518.6	9920.2	1518.8	9951.9	1518.9	9962.5	1517.6	9968.2	1517.5	9980.7
GR	1518.4	9984.6	1517.6	9993.1	1518.5	9997.3	1519.0	10000.0	1519.0	10000.1
GR	1518.5	10017.0	1518.4	10036.0	1517.9	10041.8	1518.6	10048.0	1518.5	10070.9
GR	1518.2	10097.2	1518.4	10104.7	1518.5	10104.8	1518.8	10133.4	1518.6	10164.6
GR	1518.3	10194.6	1518.0	10204.7	1518.0	10215.3	1517.6	10222.4	1517.0	10235.8
GR	1516.1	10242.5	1516.1	10248.1	1516.9	10274.9	1516.9	10295.7	1516.7	10305.2
GR	1516.4	10309.0	1516.8	10311.9	1516.7	10314.8	1516.1	10320.0	1516.9	10327.3
GR	1518.5	10370.3	1518.8	10415.3	1518.3	10458.0	1518.4	10493.3	1518.5	10544.2
GR	1518.4	10569.5	1519.1	10587.3	1518.1	10591.5	1518.5	10605.9	1518.9	10653.5
GR	1519.1	10680.7	1520.2	10723.7	1520.9	10752.8	1520.0	10808.8	1520.3	10851.1
GR	1520.9	10898.2	1520.5	10942.4	1520.9	10971.8	1520.4	11007.4	1520.6	11055.6
GR	1520.6	11091.4	1520.2	11121.3	1520.1	11137.8	1518.3	11145.6	1519.2	11149.7
GR	1520.0	11169.0	1520.0	11201.1	1520.6	11222.0	1520.3	11253.1	1520.1	11253.4
ET		7.1	9.1				9245.1	10244.9	9984.4	10163.6
X1	1.1667	89	9992.4	10026.1	635	645	645			
GR	1527.7	9245.1	1526.8	9288.0	1526.5	9337.5	1526.8	9381.5	1526.3	9424.5
GR	1527.4	9461.5	1526.5	9505.4	1526.3	9553.1	1525.8	9594.7	1524.7	9640.7
GR	1523.9	9688.4	1523.9	9717.3	1523.9	9761.3	1524.5	9798.2	1524.4	9843.3
GR	1524.7	9874.7	1523.9	9900.3	1522.9	9917.9	1523.0	9931.7	1523.2	9956.1
GR	1522.2	9975.9	1522.8	9992.4	1522.0	10000.0	1521.6	10000.1	1521.3	10007.4
GR	1521.7	10021.3	1523.0	10026.1	1523.2	10042.8	1523.0	10052.9	1523.2	10070.3
GR	1523.7	10070.4	1523.8	10089.9	1523.9	10107.6	1524.1	10126.8	1524.5	10137.0
GR	1524.3	10149.0	1524.9	10168.6	1524.9	10189.8	1525.4	10198.0	1525.9	10208.6
GR	1525.9	10218.3	1526.2	10224.5	1525.7	10230.0	1525.6	10235.1	1526.0	10244.9
GR	1525.0	10327.6	1523.8	10343.0	1523.1	10356.8	1523.4	10364.4	1522.9	10370.7
GR	1522.9	10375.2	1523.0	10388.3	1523.0	10423.4	1524.0	10461.6	1524.6	10502.9
GR	1524.9	10541.6	1524.1	10572.6	1525.1	10614.4	1524.8	10640.3	1524.9	10668.7
GR	1524.6	10696.0	1524.0	10708.3	1524.5	10718.8	1524.5	10748.6	1524.8	10767.8
GR	1525.2	10809.9	1525.4	10846.4	1526.2	10876.1	1526.2	10896.5	1526.5	10920.1
GR	1526.9	10929.8	1526.6	10946.2	1526.6	10978.7	1526.7	11011.0	1526.9	11048.0
GR	1527.0	11083.7	1528.0	11130.5	1528.4	11175.2	1528.7	11212.6	1528.5	11260.7
GR	1528.8	11294.7	1526.8	11310.8	1526.1	11318.9	1528.7	11324.9	1529.7	11335.2
GR	1529.9	11354.3	1529.9	11387.2	1529.9	11408.8	1530.5	11414.5		
ET		7.1	9.1				9417.5	10350.0	9989	10084.9
X1	1.2917	95	10036.9	10084.9	670	680	670			
GR	1534.3	9417.5	1534.2	9439.9	1534.0	9473.9	1534.1	9511.1	1533.8	9547.0
GR	1532.8	9563.6	1532.6	9591.8	1532.5	9620.4	1532.0	9653.6	1531.3	9681.0
GR	1530.7	9708.8	1530.7	9722.0	1530.2	9737.8	1529.7	9750.4	1529.6	9766.4
GR	1529.7	9796.6	1530.1	9835.7	1529.9	9869.5	1529.2	9904.1	1529.6	9955.3
GR	1529.2	9982.8	1530.3	10000.0	1529.5	10000.1	1529.4	10018.5	1528.9	10029.6
GR	1529.2	10036.9	1527.0	10049.7	1526.5	10058.7	1526.9	10068.4	1528.0	10075.3
GR	1528.4	10084.9	1528.5	10096.1	1529.9	10102.9	1530.3	10116.0	1531.2	10130.8

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GR	1531.6	10149.1	1531.8	10156.9	1531.9	10175.3	1531.9	10188.0	1531.9	10208.2
GR	1531.1	10229.9	1531.9	10251.9	1532.1	10270.2	1533.7	10287.3	1534.3	10307.3
GR	1534.6	10325.3	1534.9	10338.2	1534.8	10360.5	1534.0	10388.8	1533.7	10417.7
GR	1532.0	10441.1	1532.2	10452.1	1531.9	10479.7	1531.9	10508.4	1532.2	10526.1
GR	1532.5	10556.1	1532.9	10571.3	1532.9	10587.5	1534.3	10602.9	1534.1	10620.0
GR	1534.4	10638.9	1534.1	10664.2	1533.7	10687.2	1534.2	10708.8	1533.2	10743.0
GR	1532.3	10771.8	1532.5	10792.5	1532.6	10800.8	1532.5	10800.9	1532.1	10809.5
GR	1531.8	10822.4	1531.2	10851.7	1531.1	10874.5	1531.1	10901.1	1531.1	10913.7
GR	1530.6	10916.7	1530.9	10920.4	1530.8	10923.3	1531.1	10943.1	1531.0	10966.6
GR	1530.4	10979.7	1530.5	10988.5	1530.1	10991.4	1530.5	10994.4	1530.5	11003.6

GR	1530.6	11014.4	1530.7	11018.6	1529.1	11021.9	1530.6	11025.4	1530.6	11047.4
GR	1530.5	11066.0	1531.0	11079.2	1532.2	11089.8	1532.3	11099.2	1532.2	11113.5
QT	2	2240	2240							
ET		7.1	9.1				9335	10350	9956	10065
X1	1.413	95	9973.0	10023.7	700	720	720			
GR	1540.7	9335.0	1540.9	9366.6	1540.0	9413.3	1540.2	9464.7	1539.9	9517.2
GR	1539.9	9577.8	1539.9	9617.6	1539.7	9658.9	1538.8	9710.1	1538.4	9729.5
GR	1537.0	9741.0	1536.0	9753.2	1536.3	9761.1	1536.9	9769.6	1538.3	9781.5
GR	1538.4	9807.7	1538.0	9837.4	1537.8	9856.2	1536.5	9880.7	1536.1	9897.2
GR	1535.2	9913.6	1533.4	9925.0	1534.9	9933.3	1536.2	9940.2	1535.5	9949.6
GR	1534.9	9955.0	1535.7	9963.6	1534.2	9973.0	1532.8	9981.8	1532.1	9989.1
GR	1533.8	9996.8	1535.0	10000.0	1535.0	10000.1	1534.6	10007.8	1533.5	10013.9
GR	1534.7	10023.7	1534.5	10035.6	1534.8	10052.3	1535.8	10064.2	1535.5	10079.7
GR	1534.6	10083.4	1534.6	10088.6	1535.8	10094.2	1536.2	10128.1	1535.8	10145.0
GR	1535.8	10152.2	1536.6	10162.4	1536.6	10178.6	1536.9	10193.0	1536.6	10198.0
GR	1537.4	10214.8	1538.2	10234.9	1538.1	10257.0	1539.9	10278.2	1540.2	10305.9
GR	1540.4	10314.6	1540.5	10333.6	1540.7	10341.7	1540.3	10360.8	1539.7	10378.4
GR	1538.3	10395.8	1537.9	10427.7	1537.9	10460.1	1538.8	10492.7	1539.9	10521.2
GR	1540.0	10540.5	1540.8	10559.6	1540.7	10573.3	1540.0	10586.3	1539.8	10605.6
GR	1538.9	10613.1	1538.7	10620.6	1539.9	10644.5	1539.9	10678.3	1541.9	10709.8
GR	1542.1	10735.3	1543.0	10766.8	1542.9	10798.5	1541.7	10825.4	1541.6	10856.0
GR	1541.2	10905.5	1539.9	10963.4	1538.6	11003.4	1538.9	11012.6	1538.3	11022.0
GR	1538.4	11034.0	1536.4	11042.3	1538.6	11054.9	1539.2	11094.6	1539.8	11151.4
GR	1539.4	11208.2	1539.9	11265.2	1539.9	11308.5	1538.8	11349.3	1538.4	11383.5
QT	2	1939	1939							
ET		7.1	9.1				9494.9	10096.9	9966.1	10068.0
X1	1.5530	95	9966.1	9993.3	690	720	730			
GR	1546.2	9306.9	1546.2	9369.3	1546.3	9437.3	1546.3	9494.9	1546.2	9544.3
GR	1545.9	9580.6	1545.2	9613.6	1545.3	9624.8	1542.5	9638.4	1543.5	9645.4
GR	1545.2	9652.8	1545.0	9669.0	1545.0	9680.1	1542.7	9693.3	1545.5	9705.7
GR	1543.6	9716.9	1544.6	9720.6	1542.5	9727.7	1544.8	9733.2	1545.2	9744.2
GR	1546.5	9757.4	1546.6	9766.6	1546.2	9791.2	1545.8	9819.5	1545.9	9840.1
GR	1545.9	9863.5	1545.2	9897.8	1545.1	9944.6	1545.2	9966.1	1541.6	9974.3
GR	1539.5	9980.3	1540.2	9985.5	1545.3	9993.3	1545.0	10000.0	1545.1	10000.1
GR	1545.2	10017.9	1544.3	10036.5	1543.9	10043.0	1542.1	10051.7	1543.3	10056.5
GR	1543.7	10065.2	1544.3	10073.1	1545.0	10078.3	1545.2	10088.9	1545.7	10096.9
GR	1544.8	10109.8	1544.2	10124.1	1544.2	10138.2	1544.2	10156.3	1543.9	10164.3
GR	1543.8	10185.9	1543.5	10205.3	1542.7	10228.7	1542.3	10269.7	1542.8	10292.1
GR	1541.9	10298.1	1539.9	10303.0	1540.7	10308.5	1542.7	10331.1	1543.1	10346.3
GR	1540.2	10354.6	1543.3	10362.3	1543.1	10374.2	1543.3	10381.4	1543.3	10391.6
GR	1544.4	10409.6	1544.0	10470.0	1543.9	10510.8	1543.9	10556.3	1543.8	10574.2
GR	1541.3	10578.0	1543.9	10583.4	1543.8	10603.7	1544.0	10623.1	1542.7	10646.0

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GR	1542.9	10655.8	1544.0	10667.0	1543.8	10681.4	1544.4	10702.7	1544.9	10721.3
GR	1544.6	10739.7	1546.4	10757.7	1546.2	10771.6	1546.2	10788.0	1546.8	10806.6
GR	1546.7	10826.4	1546.5	10849.1	1546.9	10857.8	1546.2	10879.9	1546.8	10911.7
GR	1546.8	10936.1	1546.6	10960.1	1547.1	10973.8	1547.9	10997.0	1548.1	11031.3
ET		7.1	9.1				9741.0	10364.5	9980	10100
X1	1.678	95	9982.8	10028.0	710	700	730			
GR	1553.6	9741.0	1553.7	9755.0	1551.7	9768.1	1550.8	9774.6	1551.0	9784.7
GR	1550.6	9789.9	1551.9	9794.2	1551.9	9800.4	1551.9	9806.7	1552.1	9814.5
GR	1552.4	9820.9	1552.1	9824.9	1552.3	9829.9	1552.1	9839.5	1551.9	9843.7
GR	1552.9	9848.9	1553.0	9860.0	1552.8	9882.0	1552.5	9898.1	1552.4	9933.0
GR	1552.2	9955.2	1551.9	9982.8	1550.4	10000.0	1550.2	10000.1	1549.5	10010.3
GR	1551.0	10014.0	1551.1	10028.0	1551.5	10037.1	1549.4	10041.3	1551.5	10045.4
GR	1552.1	10075.3	1552.7	10098.6	1552.4	10125.4	1552.8	10170.1	1553.9	10202.9
GR	1554.9	10237.5	1554.9	10261.0	1554.9	10287.4	1556.1	10306.5	1556.6	10330.6
GR	1557.3	10364.5	1557.2	10399.2	1556.9	10431.2	1556.5	10471.3	1556.8	10487.1
GR	1555.0	10507.8	1554.1	10529.5	1553.8	10548.9	1552.7	10576.2	1552.5	10609.4
GR	1551.7	10632.5	1551.2	10644.4	1550.2	10649.1	1551.7	10653.4	1551.5	10679.1

GR	1551.9	10853.0	1551.4	10868.8	1552.2	10875.4	1552.2	10888.2	1552.5	10904.9
GR	1552.7	10919.1	1552.7	10933.2	1552.1	10953.5	1552.0	10991.4	1552.4	11004.6
GR	1550.4	11012.9	1552.1	11016.7	1552.3	11038.7	1552.4	11052.7	1552.8	11079.3
GR	1552.8	11095.7	1552.3	11101.1	1552.7	11105.5	1552.7	11117.2	1552.9	11124.9
GR	1552.6	11132.3	1553.1	11138.1	1553.6	11160.9	1554.0	11183.2	1554.1	11207.1
GR	1554.7	11239.0	1555.9	11270.7	1555.6	11297.6	1555.2	11319.9	1554.2	11347.2
GR	1554.2	11374.4	1554.6	11405.8	1553.2	11411.8	1554.2	11417.3	1554.2	11439.7
GR	1554.3	11469.4	1554.7	11507.2	1555.1	11524.9	1555.9	11554.4	1557.0	11579.4
OT	2	1866	1866							
ET		7.1	9.1				9538.5	10223.0	9949.8	10063.3
X1	1.8182	95	9989.4	10021.6	770	700	725			
GR	1560.0	9502.0	1561.1	9538.5	1560.8	9577.2	1559.6	9598.2	1559.6	9610.0
GR	1557.4	9621.3	1557.6	9633.4	1559.6	9641.2	1560.4	9665.0	1560.3	9689.3
GR	1560.2	9754.5	1560.0	9767.1	1559.9	9782.2	1559.8	9795.3	1560.1	9805.8
GR	1560.1	9909.3	1559.9	9929.2	1559.9	9940.6	1558.8	9960.9	1558.8	9976.6
GR	1558.7	9989.4	1558.9	10000.0	1558.2	10000.1	1558.3	10010.4	1558.3	10015.3
GR	1557.6	10018.8	1558.9	10021.6	1558.7	10036.9	1558.6	10053.9	1559.1	10080.4
GR	1559.2	10091.4	1557.1	10100.4	1559.2	10105.2	1559.6	10118.1	1560.1	10142.6
GR	1560.3	10170.3	1561.0	10196.1	1561.5	10223.0	1561.2	10256.1	1561.0	10280.8
GR	1560.8	10299.9	1560.2	10313.1	1561.1	10328.5	1560.8	10339.9	1559.6	10347.6
GR	1561.1	10353.5	1562.1	10375.9	1562.1	10410.2	1562.4	10440.9	1562.1	10480.8
GR	1560.8	10518.3	1561.2	10560.3	1560.7	10585.2	1559.3	10593.7	1561.0	10601.1
GR	1561.6	10618.9	1561.2	10647.1	1561.8	10655.4	1561.9	10655.5	1562.0	10675.8
GR	1563.9	10857.0	1563.9	10883.5	1564.2	10913.7	1564.6	10963.5	1564.3	10993.6
GR	1564.4	11008.2	1562.9	11024.7	1561.0	11051.1	1560.2	11077.0	1560.1	11101.9
GR	1559.4	11105.6	1560.2	11113.6	1560.2	11138.6	1559.8	11157.7	1560.5	11167.1
GR	1559.6	11186.9	1560.3	11209.7	1561.1	11249.0	1561.3	11274.0	1561.2	11300.9
GR	1561.1	11455.2	1561.1	11513.0	1560.9	11553.3	1561.5	11568.4	1559.7	11573.6
GR	1560.7	11577.9	1561.3	11604.1	1561.2	11619.4	1558.3	11626.6	1561.3	11631.6
GR	1561.9	11677.2	1561.6	11710.7	1561.5	11750.5	1562.4	11788.1	1563.1	11824.0

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ET		7.1	9.1				9534.3	10097.6	9899.1	10003.9
X1	1.939	95	9974.0	10003.9	680	670	680			
GR	1569.7	9534.3	1569.5	9565.5	1569.0	9596.5	1568.8	9636.6	1568.1	9680.8
GR	1567.9	9721.8	1567.1	9755.9	1566.5	9787.2	1566.3	9807.7	1566.2	9825.0
GR	1566.2	9845.7	1566.2	9859.6	1565.9	9867.3	1566.3	9878.2	1566.5	9892.9
GR	1566.8	9951.9	1566.2	9966.0	1565.9	9974.0	1563.4	9982.1	1563.8	9999.4
GR	1564.0	10000.0	1563.8	10000.1	1566.4	10003.9	1566.9	10021.3	1568.1	10045.0
GR	1568.0	10066.0	1568.6	10097.6	1568.3	10122.2	1568.0	10156.9	1567.9	10183.0
GR	1568.1	10204.7	1568.6	10213.9	1568.2	10246.3	1567.8	10280.2	1567.9	10313.5
GR	1567.9	10351.8	1567.9	10403.2	1568.0	10414.4	1566.9	10419.2	1567.8	10425.6
GR	1567.7	10448.9	1567.7	10456.5	1568.1	10482.9	1569.0	10519.4	1570.0	10552.7
GR	1570.4	10597.9	1570.0	10635.5	1569.8	10688.1	1569.2	10720.8	1569.8	10775.4
GR	1569.8	10826.6	1567.5	10832.5	1569.6	10836.9	1569.8	10873.4	1569.5	10907.0
GR	1569.8	10960.0	1570.0	10994.4	1569.0	11034.4	1569.3	11091.1	1569.3	11158.6
GR	1569.5	11226.2	1570.4	11284.9	1570.6	11313.5	1570.1	11323.7	1570.5	11351.5
GR	1572.3	11506.6	1572.9	11506.7	1572.9	11523.3	1572.9	11544.8	1572.6	11563.3
GR	1572.1	11574.0	1572.6	11582.8	1572.9	11593.5	1573.0	11608.0	1572.5	11627.1
GR	1571.8	11746.5	1571.6	11767.1	1570.1	11789.4	1570.8	11801.0	1570.7	11826.0
GR	1570.6	11918.0	1570.4	11942.5	1570.2	11963.1	1568.8	11972.6	1569.8	11979.1
GR	1569.6	11994.2	1568.6	12008.0	1567.2	12016.0	1567.2	12022.4	1569.8	12031.8
GR	1569.2	12189.6	1569.7	12220.5	1569.8	12249.8	1570.4	12277.5	1571.1	12299.7
OT	2	1825	1825							
ET		7.1	9.1				9689.1	10356.5	9963.2	10097.8
X1	2.0568	95	9963.2	10000.0	620	650	670			
GR	1575.9	9689.1	1574.3	9844.3	1574.3	9875.5	1574.6	9895.9	1574.7	9912.6
GR	1574.1	9932.1	1573.9	9949.3	1572.0	9963.2	1570.1	9971.7	1570.2	9989.0
GR	1572.1	9999.7	1572.7	10000.0	1572.0	10000.1	1572.8	10005.9	1572.8	10016.7
GR	1570.1	10027.8	1572.2	10035.4	1571.8	10052.9	1571.8	10079.5	1571.8	10102.4
GR	1572.3	10120.1	1572.3	10141.7	1572.3	10159.7	1570.8	10169.0	1571.9	10173.9

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GR   1571.7   10195.6   1572.7   10218.0   1572.7   10240.0   1571.8   10259.4   1571.8   10278.4
GR   1572.9   10304.5   1573.3   10331.8   1574.6   10356.5   1574.6   10381.2   1574.3   10397.4
GR   1572.3   10408.3   1572.2   10419.7   1572.0   10429.6   1573.8   10445.2   1572.5   10462.7
GR   1573.5   10476.3   1573.8   10495.9   1574.2   10516.3   1573.5   10525.8   1574.4   10529.9
GR   1574.6   10548.2   1574.8   10572.5   1575.2   10600.7   1575.4   10632.2   1576.1   10663.2
GR   1576.7   10782.9   1577.3   10805.4   1577.6   10837.8   1578.0   10903.5   1578.1     11036
GR   1579.0   11470.3   1579.6   11517.4   1579.0   11541.3   1578.0   11568.5   1578.6   11587.2
GR   1577.6   11606.0   1577.4   11626.5   1577.4   11639.9   1578.4   11656.7   1578.8   11691.3
GR   1578.6   11714.0   1578.0   11738.1   1577.2   11763.6   1576.6   11786.7   1577.3   11795.2
GR   1576.7   11811.3   1577.0   11835.4   1575.9   11841.4   1576.9   11846.8   1576.6   11857.9
GR   1576.1   11868.3   1576.8   11873.8   1576.4   11887.3   1577.1   11910.0   1577.6   11943.2
GR   1578.7   12099.7   1577.9   12120.4   1577.6   12132.4   1577.9   12165.8   1577.9   12194.4
GR   1577.3   12218.4   1576.4   12238.3   1577.5   12254.8   1577.8   12277.6   1577.9   12297.4
GR   1577.7   12313.4   1576.1   12326.7   1575.5   12345.1   1572.9   12358.9   1574.3   12361.1

ET              7.1       9.1                                 9768.2     10472      9871     9950.0
        PRIVATE STOCK POND DIVERSION LEVEE, 100 FT. UPSTREAM THIS SECTION.
        LEVEE ASSUMED BREACHED FOR ANALYSIS.
X1   2.1477       82    9871.0    9909.1       530       500       550
GR   1578.8   9693.5   1578.8    9731.6   1579.1    9768.2   1578.8    9797.3   1579.0    9825.0
GR   1579.3   9845.4   1579.0    9856.8   1577.2    9871.0   1574.6    9885.4   1574.4    9896.5
GR   1575.1   9904.2   1577.4    9909.1   1577.8    9914.9   1576.3    9929.4   1577.0    9937.7
GR   1577.5   9950.4   1578.9    9966.4   1578.7    9981.0   1579.2    9990.8   1579.4   10000.0
1
   06MAY93      11:42:09                                                                    PAGE    8


GR   1578.7   10000.1   1578.1   10016.5   1578.6   10037.2   1579.9   10048.3   1578.4   10048.4
GR   1578.8   10066.3   1579.0   10081.0   1578.9   10103.5   1579.3   10121.0   1578.6   10133.2
GR   1577.6   10152.1   1577.0   10169.0   1576.7   10174.9   1577.6   10182.3   1577.9   10197.8
GR   1578.0   10224.8   1578.0   10244.6   1578.4   10265.8   1578.4   10281.2   1578.0   10299.7
GR   1577.2   10311.8   1576.9   10319.6   1577.9   10332.9   1577.6   10351.4   1576.9   10362.8
GR   1577.4   10368.3   1577.6   10379.7   1578.6   10397.2   1578.7   10412.9   1578.8   10430.8
GR   1579.2   10450.3   1579.2   10472.4   1578.7   10497.1   1578.5   10521.7   1577.8   10541.8
GR   1577.8   10564.7   1577.9   10591.9   1578.2   10615.9   1577.3   10637.6   1576.4   10651.6
GR   1577.0   10656.5   1576.9   10668.0   1575.7   10680.0   1575.6   10686.9   1576.7   10691.8
GR   1576.7   10701.7   1577.6   10709.8   1577.3   10722.7   1576.6   10734.3   1577.3   10747.5
GR   1577.2   10760.3   1577.7   10766.2   1577.2   10778.5   1577.2   10789.0   1576.6   10797.2
GR   1577.5   10803.7   1577.4   10815.3   1577.5   10835.4   1578.2   10857.7   1578.9   10882.3
GR   1579.3   10910.4   1579.6   10919.6

ET              7.1       9.1                                 9844.4    10350.0      9900    10040
X1   2.2045       58    9910.8    9958.6       200       200       200
GR   1580.8   9791.1   1581.0    9813.0   1580.8    9832.5   1581.3    9844.4   1580.1    9857.8
GR   1579.6   9869.4   1579.5    9878.5   1579.4    9884.5   1579.7    9896.8   1580.0    9910.8
GR   1579.5   9922.5   1579.1    9931.8   1578.8    9952.2   1579.9    9958.6   1580.0    9970.0
GR   1580.0   9992.5   1580.0   10000.0   1580.0   10000.1   1579.9   10013.6   1580.0   10038.3
GR   1580.3   10053.4  1580.3   10068.6   1581.0   10081.8   1581.2   10099.7   1581.3   10113.5
GR   1581.1   10126.0  1580.2   10140.3   1580.2   10159.1   1580.2   10168.7   1580.3   10175.4
GR   1580.6   10192.2  1580.5   10208.8   1580.8   10232.9   1580.7   10252.2   1580.7   10275.4
GR   1580.6   10291.2  1580.3   10305.3   1580.4   10314.2   1581.1   10319.1   1580.1   10329.7
GR   1580.9   10335.3  1581.4   10350.0   1581.0   10373.4   1580.7   10389.7   1581.3   10397.5
GR   1580.3   10410.3  1580.0   10423.0   1581.2   10431.9   1581.4   10449.2   1581.7   10473.4
GR   1581.8   10507.8  1581.7   10521.7   1580.8   10536.1   1579.7   10541.1   1581.4   10547.1
GR   1581.9   10558.2  1582.2   10577.4   1582.2   10591.3

ET              7.1       9.1                                 9898.3    10260.3   10025.5   10089.1
X1   2.2424       91   10025.5   10066.5       300       280       350
GR   1584.7   9842.5   1584.7    9866.7   1584.7    9898.3   1584.6    9926.0   1584.6    9942.7
GR   1584.0   9949.3   1583.7    9962.0   1583.2    9976.5   1583.2    9993.4   1582.8   10000.0
GR   1582.2   10025.5  1581.5   10030.1   1581.3   10037.3   1581.3   10047.0   1581.5   10055.4
GR   1581.8   10061.9  1581.9   10066.5   1582.0   10076.4   1582.8   10086.1   1582.9   10090.8
GR   1584.2   10149.5  1584.3   10165.0   1584.4   10184.3   1584.4   10197.6   1584.4   10205.4
GR   1584.5   10258.0  1584.9   10260.3   1584.6   10269.0   1584.6   10276.7   1584.4   10283.1
GR   1585.1   10345.5  1585.3   10363.0   1585.6   10382.4   1585.5   10397.6   1585.5   10416.4
GR   1584.6   10476.0  1584.0   10485.3   1583.9   10499.9   1584.2   10507.6   1583.3   10513.9
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GR	1584.6	10528.1	1584.0	10542.9	1583.9	10566.4	1583.7	10590.4	1584.4	10599.2
GR	1582.9	10606.1	1583.0	10611.5	1583.5	10616.0	1584.0	10623.4	1583.8	10650.1
GR	1582.2	10743.8	1582.5	10752.2	1582.5	10762.0	1581.8	10775.6	1582.0	10792.4
GR	1581.4	10803.7	1581.3	10819.0	1580.1	10831.3	1579.7	10837.0	1581.3	10843.0
GR	1582.0	10851.3	1581.7	10858.1	1582.3	10865.5	1581.8	10875.2	1580.9	10883.2
GR	1579.5	10891.8	1580.7	10904.7	1580.8	10915.8	1582.2	10928.2	1583.2	10936.9
GR	1584.8	11037.3	1584.8	11062.2	1584.7	11088.6	1584.7	11106.0	1584.3	11129.8
GR	1586.1	11343.8	1585.5	11365.0	1585.4	11392.1	1585.6	11405.0	1585.0	11416.8
GR	1584.6	11435.4	1584.3	11463.1	1584.3	11496.1	1584.0	11511.0	1583.2	11515.3
GR	1582.8	11612.7	1583.8	11617.7	1583.9	11637.9	1584.0	11655.0	1584.2	11684.0
GR	1586.2	11835.9								

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ET		7.1	9.1				9819.5	10343.2	9980	10080
X1	2.322	95	9993.6	10018.5	450	470	470			
GR	1589.8	9819.5	1589.8	9834.1	1589.5	9849.3	1588.1	9868.6	1588.3	9871.4
GR	1588.3	9934.6	1588.4	9948.1	1588.3	9955.3	1587.9	9964.3	1587.8	9972.7
GR	1587.9	9980.6	1586.5	9993.6	1586.7	10000.0	1586.2	10000.1	1585.3	10004.6
GR	1584.4	10013.2	1586.3	10018.5	1586.5	10024.8	1587.1	10029.2	1587.5	10033.3
GR	1586.7	10038.1	1586.8	10045.5	1585.8	10052.0	1584.7	10057.6	1584.7	10067.6
GR	1587.4	10076.7	1587.8	10084.7	1588.2	10100.2	1588.4	10115.8	1588.6	10131.7
GR	1589.5	10154.4	1589.6	10167.8	1590.0	10183.9	1590.1	10200.0	1590.3	10211.9
GR	1592.0	10343.2	1592.1	10361.7	1592.1	10389.9	1592.5	10418.5	1592.8	10442.0
GR	1592.2	10479.9	1592.1	10499.5	1592.1	10523.5	1592.1	10535.8	1591.9	10545.4
GR	1590.8	10690.0	1590.6	10708.3	1590.2	10717.8	1590.4	10722.6	1590.9	10729.2
GR	1590.2	10843.0	1590.3	10865.6	1590.0	10885.3	1590.4	10902.2	1590.1	10908.9
GR	1590.1	10933.4	1590.3	10956.0	1590.1	10974.9	1590.0	10984.0	1589.8	10993.9
GR	1589.6	11006.4	1588.8	11020.4	1588.8	11021.6	1588.1	11021.7	1587.7	11027.8
GR	1586.6	11033.5	1585.3	11040.8	1585.1	11046.8	1587.1	11051.5	1588.7	11057.0
GR	1588.9	11065.0	1589.2	11073.4	1590.2	11085.7	1590.2	11095.0	1590.9	11108.1
GR	1591.4	11129.2	1591.2	11156.2	1591.2	11183.2	1591.3	11209.0	1590.4	11226.0
GR	1590.2	11246.1	1589.9	11266.0	1589.2	11274.3	1587.3	11282.7	1589.4	11291.6
GR	1590.2	11303.7	1590.4	11303.8	1590.9	11319.6	1591.1	11337.2	1590.7	11360.7
GR	1591.1	11368.5	1590.6	11385.5	1590.1	11396.3	1590.4	11410.0	1592.0	11485
OT	2	1694	1694							
ET		7.1	9.1				9925.7	10119.5	9993	10032.5
X1	2.439	95	9993.0	10017.5	620	630	620			
GR	1596.3	9925.7	1596.2	9940.2	1594.9	9954.1	1594.9	9959.5	1594.2	9965.3
GR	1593.1	9974.3	1593.3	9979.0	1592.6	9985.6	1592.2	9993.0	1591.6	10000.0
GR	1590.7	10000.1	1590.4	10004.3	1590.5	10008.6	1591.9	10012.7	1593.5	10017.5
GR	1593.6	10022.7	1593.1	10026.5	1593.9	10030.3	1594.6	10035.5	1595.5	10040.4
GR	1595.9	10043.6	1595.5	10047.7	1594.8	10052.4	1594.6	10057.6	1594.5	10062.5
GR	1595.7	10085.3	1596.4	10095.5	1596.3	10104.1	1596.3	10110.3	1596.5	10119.5
GR	1596.5	10128.5	1596.3	10137.5	1596.3	10144.2	1596.2	10154.2	1596.1	10167.8
GR	1595.2	10242.3	1594.8	10250.9	1595.0	10259.3	1594.2	10267.3	1593.7	10276.0
GR	1593.7	10332.8	1593.7	10341.0	1593.2	10350.0	1592.7	10357.1	1591.7	10364.8
GR	1590.1	10370.0	1590.4	10372.6	1592.3	10375.8	1593.4	10378.8	1593.4	10381.6
GR	1593.1	10386.3	1593.4	10391.1	1593.4	10397.6	1593.3	10403.8	1592.9	10410.9
GR	1591.9	10418.1	1592.3	10421.8	1592.7	10428.0	1593.5	10435.4	1594.1	10442.3
GR	1594.2	10452.3	1595.4	10463.5	1595.4	10479.4	1594.9	10494.1	1594.5	10505.9
GR	1594.1	10515.6	1593.5	10526.9	1593.3	10532.3	1593.5	10537.2	1591.7	10544.6
GR	1590.2	10550.9	1591.2	10555.3	1593.4	10559.9	1593.6	10566.0	1593.0	10574.2
GR	1592.8	10581.1	1592.1	10587.3	1593.1	10592.3	1593.8	10601.0	1594.1	10612.4
GR	1594.6	10623.7	1594.9	10635.7	1594.7	10645.3	1595.6	10656.0	1595.9	10665.7
GR	1596.2	10678.3	1596.5	10697.0	1597.2	10708.9	1597.4	10724.4	1597.5	10738.8
GR	1597.4	10748.1	1596.8	10757.8	1596.8	10769.9	1597.1	10780.8	1597.4	10792.4
ET		7.1	9.1				9897.2	10218.9	9952	10081.3
X1	2.5227	95	9958.6	9992.8	425	425	425			
GR	1601.0	9851.6	1600.7	9869.6	1600.8	9883.9	1601.2	9897.2	1601.1	9911.5
GR	1600.9	9921.3	1600.9	9930.2	1600.9	9937.7	1600.1	9946.5	1598.6	9958.6
GR	1597.5	9965.1	1596.8	9970.2	1596.5	9974.1	1597.1	9978.9	1597.4	9992.8

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GR   1599.4   10006.3   1600.5   10013.9   1600.7   10019.8   1600.3   10027.1   1600.7   10032.3
GR   1599.8   10058.1   1598.0   10072.3   1598.1   10076.9   1600.1   10081.3   1600.1   10085.4
GR   1600.5   10092.3   1600.9   10099.1   1601.6   10105.6   1601.6   10113.2   1601.4   10122.4
1
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GR   1601.9   10166.0   1601.8   10172.2   1601.9   10186.3   1601.9   10199.4   1602.0   10218.9
GR   1602.2   10234.0   1602.2   10250.6   1602.1   10269.5   1601.9   10286.4   1601.9   10308.7
GR   1600.9   10434.7   1600.9   10449.4   1600.8   10462.3   1599.8   10474.4   1599.0   10484.4
GR   1598.8   10495.4   1596.0   10504.7   1596.6   10507.6   1597.9   10517.2   1598.1   10530.6
GR   1598.3   10545.6   1599.1   10550.9   1598.9   10559.5   1598.9   10564.5   1599.8   10571.5
GR   1597.9   10643.1   1597.1   10660.8   1596.5   10676.1   1596.7   10682.4   1595.2   10686.5
GR   1596.6   10690.8   1596.7   10703.5   1597.5   10711.3   1597.1   10719.5   1597.3   10725.7
GR   1598.6   10731.9   1599.6   10739.8   1600.7   10756.8   1601.2   10773.9   1601.4   10794.4
GR   1600.7   10961.3   1599.9   10973.6   1599.1   10986.4   1597.9   10993.2   1597.1   11000.4
GR   1596.4   11007.3   1595.7   11010.4   1596.6   11013.0   1596.3   11018.0   1597.3   11027.0
GR   1597.0   11034.3   1597.8   11041.5   1597.8   11050.9   1597.8   11068.4   1598.0   11084.8
GR   1599.2   11095.1   1600.5   11109.9   1600.6   11120.5   1600.6   11138.3   1600.4   11145.3
GR   1601.3   11196.2   1600.7   11213.0   1600.9   11227.3   1601.6   11242.6   1601.1   11252.9

QT       2       896       896
ET               7.1       9.1                                9892.1   10154.8   10012.0   10056.0
X1   2.621        80   10012.9   10029.5       550       550       550
GR   1607.5    9816.0   1607.0    9832.6   1606.8    9854.1   1606.5    9875.2   1607.5    9892.1
GR   1606.6    9903.8   1606.4    9920.6   1606.4    9933.8   1606.2    9942.2   1605.9    9946.9
GR   1606.5    9953.1   1606.9    9958.9   1606.5    9965.3   1606.3    9973.2   1606.6    9983.0
GR   1606.9    9991.2   1606.9    9996.5   1606.8   10000.0   1606.6   10000.1   1606.0   10007.2
GR   1605.1   10012.9   1604.2   10016.2   1604.2   10023.3   1604.8   10026.8   1605.9   10029.5
GR   1606.0   10034.0   1605.6   10044.3   1605.6   10049.0   1606.0   10054.8   1606.2   10060.1
GR   1606.5   10065.1   1606.4   10071.0   1606.9   10078.5   1607.2   10086.2   1607.0   10090.4
GR   1607.2   10099.2   1607.5   10109.9   1607.4   10125.3   1608.0   10136.9   1608.2   10144.5
GR   1608.5   10154.8   1608.5   10168.1   1608.8   10182.2   1608.5   10182.3   1608.2   10205.7
GR   1607.9   10286.2   1608.4   10294.6   1607.9   10304.0   1607.4   10314.5   1607.4   10324.0
GR   1606.4   10332.0   1607.5   10336.3   1607.4   10341.9   1606.8   10348.4   1607.0   10356.8
GR   1607.6   10402.5   1607.4   10411.3   1607.1   10419.7   1604.2   10427.6   1606.3   10436.2
GR   1606.2   10449.5   1608.0   10471.0   1608.0   10483.8   1608.6   10491.6   1607.9   10501.4
GR   1607.6   10516.7   1607.5   10524.8   1607.3   10536.2   1607.2   10542.4   1605.9   10548.1
GR   1606.8   10553.3   1606.8   10566.0   1606.8   10576.3   1606.6   10581.6   1607.8   10584.6
GR   1608.3   10686.2   1607.9   10704.3   1607.6   10715.0   1607.7   10726.3   1607.5   10742.0

QT       2       151       151
ET               7.1       9.1                                9973.0   10009.0   9973.0    10009.0
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN 4:1 FLARE
        ANGLE OF CULVERT OUTLET.
        FLOODPLAIN DELINEATION PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
        FLOW LIMITS IS POSSIBLE.
X1   2.750        30    9986.8    9995.2       750       680       710
GR   1616.2    9825.6   1615.4    9854.9   1615.4    9869.5   1615.4    9880.7   1615.7    9887.8
GR   1615.5    9895.5   1615.2    9907.2   1614.8    9919.5   1614.6    9927.5   1614.7    9933.5
GR   1614.7    9944.7   1614.9    9953.9   1614.5    9960.5   1614.0    9966.8   1613.9    9975.6
GR   1613.5    9981.7   1612.8    9986.8   1611.9    9990.1   1611.3    9992.2   1612.5    9995.2
GR   1612.8    9997.7   1612.8   10000.0   1612.8   10000.1   1612.8   10003.9   1613.3   10008.7
GR   1614.4   10044.7   1614.1   10050.9   1614.3   10055.6   1614.4   10061.1   1614.3   10069.7

NC    .035      .035      .035        .3        .5
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        BEGIN SUN VALLEY PARKWAY CULVERT (1-10' X 3' RCB  - STRUC. NO. 16)
X1   2.759         4      9995     10005        50        50        50
X3      10                                                          1618.4    1618.4
GR   1618.5      9995      1615      9995      1615     10005    1618.5     10005

NC    .012      .012      .012
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SC    1.012       .2       2.7         0         3        10       133      12.1    1615.4      1615
        END CULVERT (STRUC. #16)
X1    2.784        0         0         0       133       133       133                .4
X2                             2    1618.4    1618.5
X3       10                                                          1619.8    1619.8
BT       11     9900    1621.7                10000    1621.4                10013.9    1621.3
BT    10014   1620.8               10054    1620.0                 10062    1619.6                10084
BT     1619            10085    1618.5                 10151    1618.5                10154     1619
BT        0    10210    1619.2         0

NC     .035     .035      .035
ET               7.1       9.1                                     9980     10014      9980     10014
        ET CARD APPLIED TO LIMIT EFFECTIVE FLOW WITHIN WEIR LEVEES LEFT AND RT.
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFFECTIVE FLOW LIMITS IS POSSIBLE AND DETENTION UPSTREAM OF
        ROAD REQUIRES PRESEVATION.
X1    2.798        6      9980     10014        75        75        75
GR     1619     9980      1618      9989      1617      9994    1616.8     10000      1617     10010
GR   1618.5    10014

NC     .049     .049      .042        .1        .3
QT        2      896       896
ET               7.1       9.1                                    9892.1   10154.8   10012.9   10055.2
        BEGIN TRIBUTARY 4A.  REPEAT CROSS-SECTION 2.621
X1   -2.621       80   10012.9   10029.5       550       550       550
GR   1607.5   9816.0    1607.0    9832.6    1606.8    9854.1    1606.5    9875.2    1607.4    9892.1
GR   1606.6   9903.8    1606.4    9920.6    1606.4    9933.8    1606.2    9942.2    1605.9    9946.9
GR   1606.5   9953.1    1606.9    9958.9    1606.5    9965.3    1606.3    9973.2    1606.6    9983.0
GR   1606.9   9991.2    1606.9    9996.5    1606.8   10000.0    1606.6   10000.1    1606.0   10007.2
GR   1605.1  10012.9    1604.2   10016.2    1604.2   10023.3    1604.8   10026.8    1605.9   10029.5
GR   1606.0  10034.0    1605.6   10044.3    1605.6   10049.0    1606.0   10054.8    1606.2   10060.1
GR   1606.5  10065.1    1606.4   10071.0    1606.9   10078.5    1607.2   10086.2    1607.0   10090.4
GR   1607.2  10099.2    1607.5   10109.9    1607.4   10125.3    1608.0   10136.9    1608.2   10144.5
GR   1608.5  10154.8    1608.5   10168.1    1608.8   10182.2    1608.5   10182.3    1608.2   10205.7
GR   1607.9  10286.2    1608.4   10294.6    1607.9   10304.0    1607.4   10314.5    1607.4   10324.0
GR   1606.4  10332.0    1607.5   10336.3    1607.4   10341.9    1606.8   10348.4    1607.0   10356.8
GR   1607.6  10402.5    1607.4   10411.3    1607.1   10419.7    1604.2   10427.6    1606.3   10436.2
GR   1606.2  10449.5    1608.0   10471.0    1608.0   10483.8    1608.6   10491.6    1607.9   10501.4
GR   1607.6  10516.7    1607.5   10524.8    1607.3   10536.2    1607.2   10542.4    1605.9   10548.1
GR   1606.8  10553.3    1606.8   10566.0    1606.8   10576.3    1606.6   10581.6    1607.8   10584.6
GR   1608.3  10686.2    1607.9   10704.3    1607.6   10715.0    1607.7   10726.3    1607.5   10742.0

QT        2      766       766
ET               7.1       9.1                                   10250.4   10349.9   10250.4   10349.9
1
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        ADD 10 TO TRIB. 4A CROSS-SECTION I.D. NUMBERS.   STA.10295= BASELINE 4A
        ET CARD APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1 FLARE ANGLE OF
        CULVERT OUTLET.
        FLOODPLAIN DELINEATION PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
        FLOW LIMITS IS POSSIBLE.
X1   12.725       52   10295.2   10305.1       575       500       550
GR   1616.2   9825.6    1615.4    9854.9    1615.4    9869.5    1615.4    9880.7    1615.7    9887.8
GR   1615.5   9895.5    1615.2    9907.2    1614.8    9919.5    1614.6    9927.5    1614.7    9933.5
GR   1614.7   9944.7    1614.9    9953.9    1614.5    9960.5    1614.0    9966.8    1613.9    9975.6
GR   1613.5   9981.7    1612.8    9986.8    1611.9    9990.1    1611.3    9992.2    1612.5    9995.2
GR   1612.8   9997.7    1612.8   10000.0    1612.8   10000.1    1612.8   10003.9    1613.3   10008.7
GR   1614.4  10044.7    1614.1   10050.9    1614.3   10055.6    1614.4   10061.1    1614.3   10069.7
GR   1614.1  10104.7    1614.0   10112.3    1613.9   10118.4    1613.8   10125.6    1613.7   10137.2
GR   1612.9  10217.1    1612.8   10229.6    1612.8   10239.9    1612.6   10252.3    1612.7   10258.0
GR   1612.2  10271.3    1611.6   10284.8    1611.3   10295.2    1610.9   10299.9    1611.2   10305.1
GR   1611.6  10322.2    1612.0   10337.0    1612.4   10350.1    1612.9   10359.1    1613.9   10370.1
GR   1614.1  10376.2    1614.3   10385.2
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NC     .035      .035      .035        .3        .5
       BEGIN SUN VALLEY PARKWAY CULVERT (6-12' X 4' RCB -STRUC. NO.17)
X1   12.734         4    9961.5   10038.5        45        45        45
X3      10                                                          1616.8    1616.8
GR   1616.8    9961.5    1612.3    9961.5    1612.3   10038.5    1616.8   10038.5

NC     .012      .012      .012
SC    6.012        .2       2.7         0         4        12       137      12.1    1612.8    1612.3
       END CULVERT (STRUC. #17)
X1   12.760         0         0         0       137       137       137                   .5
X2                            2    1616.8    1617.5
X3      10                                                           1619      1619

NC     .035      .035      .035
BT      10     10000    1620.4                10040    1620.3               10040.1    1619.8
BT   10080    1619.0               10088    1618.6                10112    1618.3               10112.1
BT   1617.5               10192    1617.5                10195     1618                 10241      1619
BT       0
ET                           9.1                                                          9948     10047
       ET  APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN WEIR LEVEES, LEFT AND RT.
       FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
       BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
       UPSTREAM OF ROAD.
X1   12.775         5      9948     10051        80        80        80
GR    1617      9948      1616      9965    1615.5      9970    1615.5     10035    1617.5     10051

NC     .049      .049      .042        .1        .3
QT       2      1694      1694
ET               7.1       9.1                                   9925.7   10119.5      9993   10032.5
       BEGIN TRIBUTARY 4B.  REPEAT CROSS-SECTION 2.439.
X1   -2.439        95    9993.0   10017.5       620       630       620
GR   1596.3    9925.7    1596.2    9940.2    1594.9    9954.1    1594.9    9959.5    1594.2    9965.3
GR   1593.1    9974.3    1593.3    9979.0    1592.6    9985.6    1592.2    9993.0    1591.6   10000.0
GR   1590.7   10000.1    1590.4   10004.3    1590.5   10008.6    1591.9   10012.7    1593.5   10017.5
GR   1593.6   10022.7    1593.1   10026.5    1593.9   10030.3    1594.6   10035.5    1595.5   10040.4
GR   1595.9   10043.6    1595.5   10047.7    1594.8   10052.4    1594.6   10057.6    1594.5   10062.5
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GR   1595.7   10085.3    1596.4   10095.5    1596.3   10104.1    1596.3   10110.3    1596.5   10119.5
GR   1596.5   10128.5    1596.3   10137.5    1596.3   10144.2    1596.2   10154.2    1596.1   10167.8
GR   1595.2   10242.3    1594.8   10250.9    1595.0   10259.3    1594.2   10267.3    1593.7   10276.0
GR   1593.7   10332.8    1593.7   10341.0    1593.2   10350.0    1592.7   10357.1    1591.7   10364.8
GR   1590.1   10370.0    1590.4   10372.6    1592.3   10375.8    1593.4   10378.8    1593.4   10381.6
GR   1593.1   10386.3    1593.4   10391.1    1593.4   10397.6    1593.3   10403.8    1592.9   10410.9
GR   1591.9   10418.1    1592.3   10421.8    1592.7   10428.0    1593.5   10435.4    1594.1   10442.3
GR   1594.2   10452.3    1595.4   10463.5    1595.4   10479.4    1594.9   10494.1    1594.5   10505.9
GR   1594.1   10515.6    1593.5   10526.9    1593.3   10532.3    1593.5   10537.2    1591.7   10544.6
GR   1590.2   10550.9    1591.2   10555.3    1593.4   10559.9    1593.6   10566.0    1593.0   10574.2
GR   1592.8   10581.1    1592.1   10587.3    1593.1   10592.3    1593.8   10601.0    1594.1   10612.4
GR   1594.6   10623.7    1594.9   10635.7    1594.7   10645.3    1595.6   10656.0    1595.9   10665.7
GR   1596.2   10678.3    1596.5   10697.0    1597.2   10708.9    1597.4   10724.4    1597.5   10738.8
GR   1597.4   10748.1    1596.8   10757.8    1596.8   10769.9    1597.1   10780.8    1597.4   10792.4

ET               7.1       9.1                                   9897.2   10218.9      9952   10081.3
       ADD 20 TO TRIB. 4B. CROSS-SECTION I.D. NUMBERS. STA. 10075= BASELINE 4B
X1   22.523        94   10058.1   10081.3       425       425       425
GR   1601.0    9851.6    1600.7    9869.6    1600.8    9883.9    1601.2    9897.2    1601.1    9911.5
GR   1600.9    9921.3    1600.9    9930.2    1600.9    9937.7    1600.1    9946.5    1598.6    9958.6
GR   1597.5    9965.1    1596.8    9970.2    1596.5    9974.1    1597.1    9978.9    1597.4    9992.8
GR   1599.4   10006.3    1600.5   10013.9    1600.7   10019.8    1600.3   10027.1    1600.7   10032.3
GR   1599.8   10058.1    1598.0   10072.3    1598.1   10076.9    1600.1   10081.3    1600.1   10085.4
GR   1600.5   10092.3    1600.9   10099.1    1601.6   10105.6    1601.6   10113.2    1601.4   10122.4
GR   1601.9   10166.0    1601.8   10172.2    1601.9   10186.3    1601.9   10199.4    1602.0   10218.9
GR   1602.2   10234.0    1602.2   10250.6    1602.1   10269.5    1601.9   10286.4    1601.9   10308.7
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GR   1600.9   10434.7    1600.9   10449.4    1600.8   10462.3    1599.8   10474.4    1599.0   10484.4
GR   1598.8   10495.4    1596.0   10504.7    1596.6   10507.6    1597.9   10517.2    1598.1   10530.6
GR   1598.3   10545.6    1599.1   10550.9    1598.9   10559.5    1598.9   10564.5    1599.8   10571.5
GR   1597.9   10643.1    1597.1   10660.8    1596.5   10676.1    1596.7   10682.4    1595.2   10686.5
GR   1596.6   10690.8    1596.7   10703.5    1597.5   10711.3    1597.1   10719.5    1597.3   10725.7
GR   1598.6   10731.9    1599.6   10739.8    1600.7   10756.8    1601.2   10773.9    1601.4   10794.4
GR   1600.7   10961.3    1599.9   10973.6    1599.1   10986.4    1597.9   10993.2    1597.1   11000.4
GR   1596.4   11007.3    1595.7   11010.4    1596.6   11013.0    1596.3   11018.0    1597.3   11027.0
GR   1597.0   11034.3    1597.8   11041.5    1597.8   11050.9    1597.8   11068.4    1598.0   11084.8
GR   1599.2   11095.1    1600.5   11109.9    1600.6   11120.5    1600.6   11138.3    1600.4   11145.3
GR   1601.3   11196.2    1600.7   11213.0    1600.9   11227.3    1601.6   11242.6

QT       2       816       816
ET               7.1       9.1                                   10182.2    10491.6      10400      10470
        STA. 10435= BASELINE 4B
X1   22.617        24   10419.7   10449.5       515       465       495
GR   1608.5   10154.8    1608.5   10168.1    1608.8   10182.2    1608.5   10182.3    1608.2   10205.7
GR   1607.9   10286.2    1608.4   10294.6    1607.9   10304.0    1607.4   10314.5    1607.4   10324.0
GR   1606.4   10332.0    1607.5   10336.3    1607.4   10341.9    1606.8   10348.4    1607.0   10356.8
GR   1607.6   10402.5    1607.4   10411.3    1607.1   10419.7    1604.2   10427.6    1606.3   10436.2
GR   1606.2   10449.5    1608.0   10471.0    1608.0   10483.8    1608.6   10491.6

ET               7.1       9.1                                   10778.8    10876.3    10800.0      10855
1
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        STA. 10800= BASELINE 4B
        ET APPLIED TO LIMIT EFFECTIVE FLOW WITHIN 4:1 FLARE ANGLE OF CULVERT
        OUTLET.
        FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW LIMITS
        POSSIBLE.
X1   22.657        71   10814.3   10840.6       220       200       210
GR   1616.2    9825.6    1615.4    9854.9    1615.4    9869.5    1615.4    9880.7    1615.7    9887.8
GR   1615.5    9895.5    1615.2    9907.2    1614.8    9919.5    1614.6    9927.5    1614.7    9933.5
GR   1614.7    9944.7    1614.9    9953.9    1614.5    9960.5    1614.0    9966.8    1613.9    9975.6
GR   1613.5    9981.7    1612.8    9986.8    1611.9    9990.1    1611.3    9992.2    1612.5    9995.2
GR   1612.8    9997.7    1612.8   10000.0    1612.8   10000.1    1612.8   10003.9    1613.3   10008.7
GR   1614.4   10044.7    1614.1   10050.9    1614.3   10055.6    1614.4   10061.1    1614.3   10069.7
GR   1614.1   10104.7    1614.0   10112.3    1613.9   10118.4    1613.8   10125.6    1613.7   10137.2
GR   1612.9   10217.1    1612.8   10229.6    1612.8   10239.9    1612.6   10252.3    1612.7   10258.0
GR   1612.2   10271.3    1611.6   10284.8    1611.3   10295.2    1610.9   10299.9    1611.2   10305.1
GR   1611.6   10322.2    1612.0   10337.0    1612.4   10350.1    1612.9   10359.1    1613.9   10370.1
GR   1614.1   10376.2    1614.3   10385.2    1614.4   10393.9    1614.4   10406.2    1613.9   10415.0
GR   1610.4   10733.4    1609.9   10763.2    1609.4   10772.6    1609.6   10777.6    1608.9   10789.3
GR   1608.8   10799.3    1608.8   10807.4    1608.2   10814.3    1608.1   10824.8    1608.2   10833.7
GR   1608.3   10840.6    1608.6   10849.5    1609.2   10857.8    1609.2   10864.9    1609.5   10873.3
GR   1610.5   10881.6

NC     .035      .035      .035        .3        .5
        BEGIN SUN VALLEY PARKWAY CULVERT (6- 10' X 4' RCB - STRUC. NO. 18)
X1   22.669         4    9961.5   10038.5        65        65        65
X3      10                                                                1614.4    1614.4
GR   1614.4    9961.5    1609.9    9961.5    1609.9   10038.5    1614.4   10038.5

NC    .012      .012      .012
SC   6.012        .2       2.7         0         6        12       148      12.3    1610.5    1609.9
        END CULVERT (STRUC. #18)
        FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW
        LIMITS IS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF RD.
X1   22.697         0         0         0       148       148       148                  .6
X2                             2    1614.5      1615
X3      10                                                                1617      1617
BT      12      9900    1618.8                10000    1618.3              10019.9    1618.3
BT   10020    1617.8                10060    1617.0                10068    1616.6                10086
BT    1616              10086.1      1615                10162      1615                10167    1615.8
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BT            10207      1616              10226      1617

NC    .049      .049      .042       .1        .3
QT       2      1825      1825
ET               7.1       9.1                                   9819.5    10343.2      9980     10080
        BEGIN TRIBUTARY 4C  REPEAT CROSS-SECTION 2.322
X1   -2.322        95    9993.6   10018.5       450       470       470
GR   1589.8    9819.5    1589.8    9834.1    1589.5    9849.3    1588.1    9868.6    1588.3    9871.4
GR   1588.3    9934.6    1588.4    9948.1    1588.3    9955.3    1587.9    9964.3    1587.8    9972.7
GR   1587.9    9980.6    1586.5    9993.6    1586.7   10000.0    1586.2   10000.1    1585.3   10004.6
GR   1584.4   10013.2    1586.3   10018.5    1586.5   10024.8    1587.1   10029.2    1587.5   10033.3
GR   1586.7   10038.1    1586.8   10045.5    1585.8   10052.0    1584.7   10057.6    1584.7   10067.6
GR   1587.4   10076.7    1587.8   10084.7    1588.2   10100.2    1588.4   10115.8    1588.6   10131.7
GR   1589.5   10154.4    1589.6   10167.8    1590.0   10183.9    1590.1   10200.0    1590.3   10211.9
GR   1592.0   10343.2    1592.1   10361.7    1592.1   10389.9    1592.5   10418.5    1592.8   10442.0
1
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GR   1592.2   10479.9    1592.1   10499.5    1592.1   10523.5    1592.1   10535.8    1591.9   10545.4
GR   1590.8   10690.0    1590.6   10708.3    1590.2   10717.8    1590.4   10722.6    1590.9   10729.2
GR   1590.2   10843.0    1590.3   10865.6    1590.0   10885.3    1590.4   10902.2    1590.1   10908.9
GR   1590.1   10933.4    1590.3   10956.0    1590.1   10974.9    1590.0   10984.0    1589.8   10993.9
GR   1589.6   11006.4    1588.8   11020.4    1588.8   11021.6    1588.1   11021.7    1587.7   11027.8
GR   1586.6   11033.5    1585.3   11040.8    1585.1   11046.8    1587.1   11051.5    1588.7   11057.0
GR   1588.9   11065.0    1589.2   11073.4    1590.2   11085.7    1590.2   11095.0    1590.9   11108.1
GR   1591.4   11129.2    1591.2   11156.2    1591.2   11183.2    1591.3   11209.0    1590.4   11226.0
GR   1590.2   11246.1    1589.9   11266.0    1589.2   11274.3    1587.3   11282.7    1589.4   11291.6
GR   1590.2   11303.7    1590.4   11303.8    1590.9   11319.6    1591.1   11337.2    1590.7   11360.7
GR   1591.1   11368.5    1590.6   11385.5    1590.1   11396.3    1590.4   11410.0    1592.0     11485

QT       2       134       134
ET               7.1       9.1                                  10119.5    10463.5   10357.1     10380
        ADD 30 TO TRIB 4C CROSS SECTION I.D. NUMBERS.  STA 10375 = BASELINE 4C
X1  32.418        95   10357.1   10375.8       550       480       555
GR   1596.3    9925.7    1596.2    9940.2    1594.9    9954.1    1594.9    9959.5    1594.2    9965.3
GR   1593.1    9974.3    1593.3    9979.0    1592.6    9985.6    1592.2    9993.0    1591.6   10000.0
GR   1590.7   10000.1    1590.4   10004.3    1590.5   10008.6    1591.9   10012.7    1593.5   10017.5
GR   1593.6   10022.7    1593.1   10026.5    1593.9   10030.3    1594.6   10035.5    1595.5   10040.4
GR   1595.9   10043.6    1595.5   10047.7    1594.8   10052.4    1594.6   10057.6    1594.5   10062.5
GR   1595.7   10085.3    1596.4   10095.5    1596.3   10104.1    1596.3   10110.3    1596.5   10119.5
GR   1596.5   10128.5    1596.3   10137.5    1596.3   10144.2    1596.2   10154.2    1596.1   10167.8
GR   1595.2   10242.3    1594.8   10250.9    1595.0   10259.3    1594.2   10267.3    1593.7   10276.0
GR   1593.7   10332.8    1593.7   10341.0    1593.2   10350.0    1592.7   10357.1    1591.7   10364.8
GR   1590.1   10370.0    1590.4   10372.6    1592.3   10375.8    1593.4   10378.8    1593.4   10381.6
GR   1593.1   10386.3    1593.4   10391.1    1593.4   10397.6    1593.3   10403.8    1592.9   10410.9
GR   1591.1   10418.1    1592.3   10421.8    1592.7   10428.0    1593.5   10435.4    1594.1   10442.3
GR   1594.2   10452.3    1595.4   10463.5    1595.4   10479.4    1594.9   10494.1    1594.5   10505.9
GR   1594.1   10515.6    1593.5   10526.9    1593.3   10532.3    1593.5   10537.2    1591.7   10544.6
GR   1590.2   10550.9    1591.2   10555.3    1593.4   10559.9    1593.6   10566.0    1593.0   10574.2
GR   1592.8   10581.1    1592.1   10587.3    1593.1   10592.3    1593.8   10601.0    1594.1   10612.4
GR   1594.6   10623.7    1594.9   10635.7    1594.7   10645.3    1595.6   10656.0    1595.9   10665.7
GR   1596.2   10678.3    1596.5   10697.0    1597.2   10708.9    1597.4   10724.4    1597.5   10738.8
GR   1597.4   10748.1    1596.8   10757.8    1596.8   10769.9    1597.1   10780.8    1597.4   10792.4

ET               7.1       9.1                                  10250.6    10571.5   10495.4     10525
        STA. 10525= BASELINE 4C
X1  32.492        95   10495.4   10517.2       400       400       415
GR   1601.0    9851.6    1600.7    9869.6    1600.8    9883.9    1601.2    9897.2    1601.1    9911.5
GR   1600.9    9921.3    1600.9    9930.2    1600.9    9937.7    1600.1    9946.5    1598.6    9958.6
GR   1597.5    9965.1    1596.8    9970.2    1596.5    9974.1    1597.1    9978.9    1597.4    9982.8
GR   1599.4   10006.3    1600.5   10013.9    1600.7   10019.8    1600.3   10027.1    1600.7   10032.3
GR   1599.8   10058.1    1598.0   10072.3    1598.1   10076.9    1600.1   10081.3    1600.1   10085.4
GR   1600.5   10092.3    1600.9   10099.1    1601.6   10105.6    1601.6   10113.2    1601.4   10122.4
GR   1601.9   10166.0    1601.8   10172.2    1601.9   10186.3    1601.9   10199.4    1602.0   10218.9
GR   1602.2   10234.0    1602.2   10250.6    1602.1   10269.5    1601.9   10286.4    1601.9   10308.7
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GR   1600.9   10434.7   1600.9   10449.4   1600.8   10462.3   1599.8   10474.4   1599.0   10484.4
GR   1598.8   10495.4   1596.0   10504.7   1596.6   10507.6   1597.9   10517.2   1598.1   10530.6
GR   1598.3   10545.6   1599.1   10550.9   1598.9   10559.5   1598.9   10564.5   1599.8   10571.5
GR   1597.9   10643.1   1597.1   10660.8   1596.5   10676.1   1596.7   10682.4   1595.2   10686.5
GR   1596.6   10690.8   1596.7   10703.5   1597.5   10711.3   1597.1   10719.5   1597.3   10725.7
GR   1598.6   10731.9   1599.6   10739.8   1600.7   10756.8   1601.2   10773.9   1601.4   10794.4
GR   1600.7   10961.3   1599.9   10973.6   1599.1   10986.4   1597.9   10993.2   1597.1   11000.4
1
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GR   1596.4   11007.3   1595.7   11010.4   1596.6   11013.0   1596.3   11018.0   1597.3   11027.0
GR   1597.0   11034.3   1597.8   11041.5   1597.8   11050.9   1597.8   11068.4   1598.0   11084.8
GR   1599.2   11095.1   1600.5   11109.9   1600.6   11120.5   1600.6   11138.3   1600.4   11145.3
GR   1601.3   11196.2   1600.7   11213.0   1600.9   11227.3   1601.6   11242.6   1601.1   11252.9

ET              7.1       9.1                                10686.2   10921.1   10838.2   10867.2
       STA. 10840= BASELINE 4C
X1   32.558       94   10838.2   10867.2       340       335       340
GR   1607.2    9816.0   1607.0    9832.6   1606.8    9854.1   1606.5    9875.2   1607.2    9892.1
GR   1606.6    9903.8   1606.4    9920.6   1606.4    9933.8   1606.2    9942.2   1605.9    9946.9
GR   1606.5    9953.1   1606.9    9958.9   1606.5    9965.3   1606.3    9973.2   1606.6    9983.0
GR   1606.9    9991.2   1606.9    9996.5   1606.8   10000.0   1606.6   10000.1   1606.0   10007.2
GR   1605.1   10012.9   1604.2   10016.2   1604.2   10021.3   1604.8   10024.8   1605.9   10029.5
GR   1606.0   10034.0   1605.6   10044.3   1605.6   10049.0   1606.0   10054.8   1606.9   10060.1
GR   1607.5   10065.1   1607.4   10071.0   1606.9   10078.5   1607.2   10086.2   1607.0   10090.4
GR   1607.2   10099.2   1607.5   10109.9   1607.4   10125.3   1608.0   10136.9   1608.2   10144.5
GR   1608.5   10154.8   1608.5   10168.1   1608.8   10182.2   1608.5   10182.3   1608.2   10205.7
GR   1607.9   10286.2   1608.4   10294.6   1607.9   10304.0   1607.4   10314.5   1607.4   10324.0
GR   1606.4   10332.0   1607.5   10336.3   1607.4   10341.9   1606.8   10348.4   1607.0   10356.8
GR   1607.6   10402.5   1607.4   10411.3   1607.1   10419.7   1604.2   10427.6   1606.3   10436.2
GR   1606.2   10449.5   1608.0   10471.0   1608.0   10483.8   1608.6   10491.6   1607.9   10501.4
GR   1607.6   10516.7   1607.5   10524.8   1607.3   10536.2   1607.2   10542.4   1605.9   10548.1
GR   1606.8   10553.3   1606.8   10566.0   1606.8   10576.3   1606.6   10581.6   1607.8   10584.6
GR   1608.3   10686.2   1607.9   10704.3   1607.6   10715.0   1607.7   10726.3   1607.5   10742.0
GR   1605.8   10806.4   1605.7   10815.5   1605.5   10821.8   1603.8   10828.9   1602.6   10838.2
GR   1602.7   10847.5   1601.8   10857.4   1603.2   10867.2   1605.4   10878.9   1606.2   10893.4
GR   1606.9   10910.3   1607.0   10921.1   1606.7   10937.1   1606.8   10951.7

ET              7.1       9.1                                  11154    11241.2     11180      11210
       STA. 11195= BASELINE 4C
       ET APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1 FLARE ANGLE OF CULVERT.
       FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING POSSIBLE BEYOND EFF. FLOW
       LIMITS.
X1   32.575       15   11190.2   11206.0       100        90        95
GR   1609.9   11092.2   1609.6   11105.4   1609.5   11114.7   1608.6   11129.4   1607.7   11141.8
GR   1606.5   11154.3   1605.4   11167.5   1605.0   11179.8   1604.7   11190.2   1604.3   11197.7
GR   1604.4   11206.0   1604.7   11214.4   1605.0   11222.7   1606.0   11230.7   1607.0   11241.2

NC    .035      .035      .035        .3        .5
       BEGIN SUN VALLEY PARKWAY CULVERT (5- 12' X 4' RCB  - STRUC. NO. 19)
X1   32.584        4      9968     10032        50        50        50
X3      10                                                          1611      1611
GR   1610.8     9968    1606.3      9968    1606.3     10032    1610.8     10032

NC    .012      .012      .012
SC   5.012       .2       2.7         0         4        12       135      12.1    1607.0    1606.3
       END CULVERT (STRUC. #19)
       FLOODPLAIN \FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
       FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF RD.
X1   32.610        0         0         0       135       135       135                .7
X2                             2      1611    1610.9
X3      10                                                       1613.3    1613.3
BT       9    10000    1614.9               10122.9    1613.7              10123    1613.2
BT   10163    1612.8               10171    1612.4               10175    1610.9              10180
1
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BT   1610.9              10188    1612.9                10248      1614

NC     .049      .049      .042       .1        .3
QT        2      1866      1866
ET               7.1       9.1                                   9534.3    10552.7    9899.1    10003.9
        BEGIN TRIBUTARY 4D.  REPEAT CROSS-SECTION 1.939
X1   -1.939        95    9974.0   10003.9       680       670       680
GR   1569.7    9534.3    1569.5    9565.5    1569.0    9596.5    1568.8    9636.6    1568.1    9680.8
GR   1567.9    9721.8    1567.1    9755.9    1566.5    9787.2    1566.3    9807.7    1566.2    9825.0
GR   1566.2    9845.7    1566.2    9859.6    1565.9    9867.3    1566.3    9878.2    1566.5    9892.9
GR   1566.8    9951.9    1566.2    9966.0    1565.9    9974.0    1563.4    9982.1    1563.8    9999.4
GR   1564.0   10000.0    1563.8   10000.1    1566.4   10003.9    1566.9   10021.3    1568.1   10045.0
GR   1568.0   10066.0    1568.6   10097.6    1568.3   10122.2    1568.0   10156.9    1567.9   10183.0
GR   1568.1   10204.7    1568.6   10213.9    1568.2   10246.3    1567.8   10280.2    1567.9   10313.5
GR   1567.9   10351.8    1567.9   10403.2    1568.0   10414.4    1566.9   10419.2    1567.8   10425.6
GR   1567.7   10448.9    1567.7   10456.5    1568.1   10482.9    1569.0   10519.4    1570.0   10552.7
GR   1570.4   10597.9    1570.0   10635.5    1569.8   10688.1    1569.2   10720.8    1569.8   10775.4
GR   1569.8   10826.6    1567.5   10832.5    1569.6   10836.9    1569.8   10873.4    1569.5   10907.0
GR   1569.8   10960.0    1570.0   10994.4    1569.0   11034.4    1569.3   11091.1    1569.3   11158.6
GR   1569.5   11226.2    1570.4   11284.9    1570.6   11313.5    1570.1   11323.7    1570.5   11351.5
GR   1572.3   11506.6    1572.9   11506.7    1572.9   11523.3    1572.9   11544.8    1572.6   11563.3
GR   1572.1   11574.0    1572.6   11582.8    1572.9   11593.5    1573.0   11608.0    1572.5   11627.1
GR   1571.8   11746.5    1571.6   11767.1    1570.1   11789.4    1570.8   11801.0    1570.7   11826.0
GR   1570.6   11918.0    1570.4   11942.5    1570.2   11963.1    1568.8   11972.6    1569.8   11979.1
GR   1569.6   11994.2    1568.6   12008.0    1567.2   12016.0    1567.2   12022.4    1569.8   12031.8
GR   1569.2   12189.6    1569.7   12220.5    1569.8   12249.8    1570.4   12277.5    1571.1   12299.7

QT        2        62        62
ET               7.1       9.1                                  10356.5    10782.9   10408.3    10445.2
        ADD 40 TO TRIB. 4D CROSS-SECTION I.D. NUMBERS.  STA. 10450= BESELINE 4D
X1   42.070        95   10408.3   10445.2       690       700       690
GR   1575.9    9689.1    1574.3    9844.3    1574.3    9875.5    1574.6    9895.9    1574.7    9912.6
GR   1574.1    9932.1    1573.9    9949.3    1572.0    9963.2    1570.1    9971.7    1570.2    9989.0
GR   1572.1    9999.7    1572.7   10000.0    1572.0   10000.1    1572.8   10005.9    1572.8   10016.7
GR   1570.1   10027.8    1572.2   10035.4    1571.8   10052.9    1571.8   10079.5    1571.8   10102.4
GR   1572.3   10120.1    1572.3   10141.7    1572.3   10159.7    1570.8   10169.0    1571.9   10173.9
GR   1571.7   10195.6    1572.7   10218.0    1572.7   10240.0    1571.8   10259.4    1571.8   10278.4
GR   1572.9   10304.5    1573.3   10331.8    1574.6   10356.5    1574.6   10381.2    1574.3   10397.4
GR   1572.3   10408.3    1572.2   10419.7    1572.0   10429.6    1573.8   10445.2    1572.5   10462.7
GR   1573.5   10476.3    1573.8   10495.9    1574.2   10516.3    1573.5   10525.8    1574.4   10529.9
GR   1574.6   10548.2    1574.8   10572.5    1575.2   10600.7    1575.4   10632.2    1576.1   10663.2
GR   1576.7   10782.9    1577.3   10805.4    1577.6   10837.8    1578.0   10903.5    1578.1     11036
GR   1579.0   11470.3    1579.6   11517.4    1579.0   11541.3    1578.0   11568.5    1578.6   11587.2
GR   1577.6   11606.0    1577.4   11626.5    1577.4   11639.9    1578.4   11656.7    1578.8   11691.3
GR   1578.6   11714.0    1578.0   11738.1    1577.2   11763.6    1576.6   11786.7    1577.3   11795.2
GR   1576.7   11811.3    1577.0   11835.4    1575.9   11841.4    1576.9   11846.8    1576.6   11857.9
GR   1576.1   11868.3    1576.8   11873.8    1576.4   11887.3    1577.1   11910.0    1577.6   11943.2
GR   1578.7   12099.7    1577.9   12120.4    1577.6   12132.4    1577.9   12165.8    1577.9   12194.4
GR   1577.3   12218.4    1576.4   12238.3    1577.5   12254.8    1577.8   12277.6    1577.9   12297.4
GR   1577.7   12313.4    1576.1   12326.7    1575.5   12345.1    1572.9   12358.9    1574.3   12361.1
1
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ET               7.1       9.1                                   10472     10882.3     10668     10691.8
        STA. 10670= BASELINE 4D.
X1   42.130        80   10668.0   10691.8       340       275       320
GR   1578.8    9693.5    1578.8    9731.6    1579.1    9768.2    1578.8    9797.3    1579.0    9825.0
GR   1579.3    9845.4    1579.0    9856.8    1577.2    9871.0    1574.6    9885.4    1574.4    9896.5
GR   1575.1    9904.2    1577.4    9909.1    1577.8    9914.9    1576.3    9929.4    1577.0    9937.7
GR   1577.5    9950.4    1578.9    9966.4    1578.7    9981.0    1579.2    9990.8    1579.4   10000.0
GR   1578.7   10000.1    1578.1   10016.5    1578.6   10037.2    1579.9   10048.3    1578.4   10048.4
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GR   1578.8   10066.3   1579.0   10081.0   1578.9   10103.5   1579.3   10121.0   1578.6   10133.2
GR   1577.6   10152.1   1577.0   10169.0   1576.7   10174.9   1577.6   10182.3   1577.9   10197.8
GR   1578.0   10224.8   1578.0   10244.6   1578.4   10265.8   1578.4   10281.2   1578.0   10299.7
GR   1577.2   10311.8   1576.9   10319.6   1577.9   10332.9   1577.6   10351.4   1576.9   10362.8
GR   1577.4   10368.3   1577.6   10379.7   1578.6   10397.2   1578.7   10412.9   1578.8   10430.8
GR   1579.2   10450.3   1579.2   10472.4   1578.7   10497.1   1578.5   10521.7   1577.8   10541.8
GR   1577.8   10564.7   1577.9   10591.9   1578.2   10615.9   1577.3   10637.6   1576.4   10651.6
GR   1577.0   10656.5   1576.9   10668.0   1575.7   10680.0   1575.6   10686.9   1576.7   10691.8
GR   1576.7   10701.7   1577.6   10709.8   1577.3   10722.7   1576.6   10734.3   1577.3   10747.5
GR   1577.2   10760.3   1577.7   10766.2   1577.2   10778.5   1577.2   10789.0   1576.6   10797.2
GR   1577.5   10803.7   1577.4   10815.3   1577.5   10835.4   1578.2   10857.7   1578.9   10882.3

ET              7.1       9.1                                10623.4     11343     10819     10843
        STA. 10815= BASELINE 4D.
X1   42.200       95   10819.0   10843.0     370       370       370
GR   1584.1    9842.5   1584.7    9866.7   1584.6    9898.3   1584.6    9926.0   1584.6    9942.7
GR   1584.0    9949.3   1583.7    9962.0   1583.2    9976.5   1583.8    9993.4   1583.1   10000.0
GR   1582.2   10025.5   1581.5   10030.1   1581.3   10037.3   1581.3   10047.0   1581.5   10055.4
GR   1581.8   10061.9   1582.9   10066.5   1583.5   10076.4   1583.8   10086.1   1583.9   10090.8
GR   1584.2   10149.5   1584.3   10165.0   1584.4   10184.3   1584.4   10197.6   1584.4   10205.4
GR   1584.5   10258.0   1584.9   10260.3   1584.6   10269.0   1584.6   10276.7   1584.4   10283.1
GR   1585.1   10345.5   1585.3   10363.0   1585.6   10382.4   1585.5   10397.6   1585.5   10416.4
GR   1584.6   10476.0   1584.0   10485.3   1583.9   10499.9   1584.2   10507.6   1583.3   10513.9
GR   1584.6   10528.1   1584.0   10542.9   1583.9   10566.4   1583.7   10590.4   1584.4   10599.2
GR   1582.9   10606.1   1583.0   10611.5   1583.5   10616.0   1584.0   10623.4   1583.8   10650.1
GR   1582.2   10743.8   1582.5   10752.2   1582.5   10762.0   1581.8   10775.6   1582.0   10792.4
GR   1581.4   10803.7   1581.3   10819.0   1580.1   10831.3   1579.7   10837.0   1581.3   10843.0
GR   1582.0   10851.3   1581.7   10858.1   1582.3   10865.5   1581.8   10875.2   1580.9   10883.2
GR   1579.5   10891.8   1580.7   10904.7   1580.8   10915.8   1582.2   10928.2   1583.2   10936.9
GR   1584.8   11037.3   1584.8   11062.2   1584.7   11088.6   1584.7   11106.0   1584.3   11129.8
GR   1586.1   11343.8   1585.5   11365.0   1585.4   11392.1   1585.6   11405.0   1585.0   11416.8
GR   1584.6   11435.4   1584.3   11463.1   1584.3   11496.1   1584.0   11511.0   1583.2   11515.3
GR   1582.8   11612.7   1583.8   11617.7   1583.9   11637.9   1584.0   11655.0   1584.2   11684.0
GR   1586.2   11835.9   1585.6   11861.4   1585.0   11884.3   1584.1   11910.2   1583.9   11931.5

ET              7.1       9.1                                 10843     11129.2   11027.8   11051.5
        STA. 11030= BASELINE 4D.
X1   42.299       95   11027.8   11051.5     515       525       525
GR   1589.8    9819.5   1589.8    9834.1   1589.5    9849.3   1588.1    9868.6   1588.3    9871.4
GR   1588.3    9934.6   1588.4    9948.1   1588.3    9955.3   1587.9    9964.3   1587.8    9972.7
GR   1587.9    9980.6   1586.5    9993.6   1586.7   10000.0   1586.2   10000.1   1585.3   10004.6
GR   1584.4   10013.2   1586.3   10018.5   1586.5   10024.8   1587.1   10029.2   1587.5   10033.3
GR   1586.7   10038.1   1586.8   10045.5   1585.8   10052.0   1584.7   10057.6   1584.7   10067.6
GR   1587.4   10076.7   1587.8   10084.7   1588.2   10100.2   1588.4   10115.8   1588.6   10131.7
GR   1589.5   10154.4   1589.6   10167.8   1590.0   10183.9   1590.1   10200.0   1590.3   10211.9
1
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GR   1592.0   10343.2   1592.1   10361.7   1592.1   10389.9   1592.5   10418.5   1592.8   10442.0
GR   1592.2   10479.9   1592.1   10499.5   1592.1   10523.5   1592.1   10535.8   1591.9   10545.4
GR   1590.8   10690.0   1590.6   10708.3   1590.2   10717.8   1590.4   10722.6   1590.9   10729.2
GR   1590.2   10843.0   1590.3   10865.6   1590.0   10885.3   1590.4   10902.2   1590.1   10908.9
GR   1590.1   10933.4   1590.3   10956.0   1590.1   10974.9   1590.0   10984.0   1589.8   10993.9
GR   1589.6   11006.4   1588.8   11020.4   1588.8   11021.6   1588.1   11021.7   1587.7   11027.8
GR   1586.6   11033.5   1585.3   11040.8   1585.1   11046.8   1587.1   11051.5   1588.7   11057.0
GR   1588.9   11065.0   1589.2   11073.4   1590.2   11085.7   1590.2   11095.0   1590.9   11108.1
GR   1591.4   11129.2   1591.2   11156.2   1591.2   11183.2   1591.3   11209.0   1590.4   11226.0
GR   1590.2   11246.1   1589.9   11266.0   1589.2   11274.3   1587.3   11282.7   1589.4   11291.6
GR   1590.2   11303.7   1590.4   11303.8   1590.9   11319.6   1591.1   11337.2   1590.7   11360.7
GR   1591.1   11368.5   1590.6   11385.5   1590.1   11396.3   1590.4   11410.0   1592.0     11485

ET              7.1       9.1                                 11688     11708     11694.6   11702.5
        STA. 11725= BASELINE 4D.
        ET APPLIED TO LIMIT EFF. FLOW TO WITHIN 4:1 FLARE ANGLE OF CULVERT OUTL.
        FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW LIMITS
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        IS POSSIBLE.
X1   42.401        95    11694.6    11702.5        540        530        540
GR   1600.5    10092.3    1600.9    10099.1     1601.6    10105.6     1601.6    10113.2     1601.4    10122.4
GR   1601.9    10166.0    1601.8    10172.2     1601.9    10186.3     1601.9    10199.4     1602.0    10218.9
GR   1602.2    10234.0    1602.2    10250.6     1602.1    10269.5     1601.9    10286.4     1601.9    10308.7
GR   1600.9    10434.7    1600.9    10449.4     1600.8    10462.3     1599.8    10474.4     1599.0    10484.4
GR   1598.8    10495.4    1596.0    10504.7     1596.6    10507.6     1597.9    10517.2     1598.1    10530.6
GR   1598.3    10545.6    1599.1    10550.9     1598.9    10559.5     1598.9    10564.5     1599.8    10571.5
GR   1597.9    10643.1    1597.1    10660.8     1596.5    10676.1     1596.7    10682.4     1595.2    10686.5
GR   1596.6    10690.8    1596.7    10703.5     1597.5    10711.3     1597.1    10719.5     1597.3    10725.7
GR   1598.6    10731.9    1599.6    10739.8     1600.7    10756.8     1601.2    10773.9     1601.4    10794.4
GR   1600.7    10961.3    1599.9    10973.6     1599.1    10986.4     1597.9    10993.2     1597.1    11000.4
GR   1596.4    11007.3    1595.7    11010.4     1596.6    11013.0     1596.3    11018.0     1597.3    11027.0
GR   1597.0    11034.3    1597.8    11041.5     1597.8    11050.9     1597.8    11068.4     1598.0    11084.8
GR   1599.2    11095.1    1600.5    11109.9     1600.6    11120.5     1600.6    11138.3     1600.4    11145.3
GR   1601.3    11196.2    1600.7    11213.0     1600.9    11227.3     1601.6    11242.6     1601.1    11252.9
GR   1600.7    11490.4    1600.6    11524.2     1600.8    11544.5     1600.1    11564.5     1599.2    11580.5
GR   1599.2    11592.9    1598.2    11605.0     1599.2    11615.4     1599.1    11628.7     1598.4    11645.4
GR   1597.8    11665.3    1597.4    11675.5     1597.4    11686.2     1596.6    11694.6     1596.4    11698.7
GR   1596.9    11702.5    1597.0    11714.4     1598.7    11730.0     1598.7    11746.6     1598.3    11758.3
GR   1598.7    11779.1    1598.6    11789.1     1599.3    11792.5     1599.2    11806.6     1599.1    11820.2

NC     .035       .035       .035        .3         .5
        BEGIN SUN VALLEY PARKWAY CULVERT (2- 42" X 29" C.S.P.A. - STRUC. NO. 22)
X1   42.406          4     9996.5    10003.5         25         25         25
X3       10                                                                          1602.4     1602.4
GR   1602.4     9996.5     1599.4     9996.5     1599.4    10003.5     1602.4    10003.5

NC     .024       .024       .024
SB     1.25       5.29       2.63          0          7        1.7       12.8          0       1600     1599.4
        END CULVERT (STRUC. #22)
        FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL UPSTREAM OF ROAD AS PONDING
1
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        OUTSIDE OF EFF. FLOW LIMITS IS POSSIBLE AND DETENTION REQUIRES
        PRESERVATION.
X1   42.432          0          0          0        135        135        135                   .6
X2                                1     1602.4     1602.9
X3       10                                                                          1604       1604
BT        8       9900     1606.1                 10000     1605.4                 10024.9     1604.5
BT    10025     1604.0                 10065     1603.2                 10073     1602.9                10082
BT   1602.9                 10118      1604

NC     .035       .035       .035
ET                                9.1                                                          9971.2    10027.8
X1   42.436          7       9990      10008         20         20         20
GR     1604       9936       1602       9990       1601       9995     1600.5      10000       1601      10004
GR     1602      10008       1604      10065

NC     .049       .049       .042         .1         .3
QT        2       1939       1939
ET                 7.1        9.1                                    9741.0    10364.5       9980      10100
        BEGIN TRIBUTARY 4E.  REPEAT CROSS-SECTION 1.678.
X1   -1.678         95     9982.8    10028.0        710        700        730
GR   1553.6     9741.0     1553.7     9755.0     1551.7     9768.1     1550.8     9774.6     1551.0     9784.7
GR   1550.6     9789.9     1551.9     9794.2     1551.9     9800.4     1551.9     9806.7     1552.1     9814.5
GR   1552.4     9820.9     1552.1     9824.9     1552.3     9829.9     1552.1     9839.5     1551.9     9843.7
GR   1552.9     9848.9     1553.0     9860.0     1552.8     9882.0     1552.5     9898.1     1552.4     9933.0
GR   1552.2     9955.2     1551.9     9982.8     1550.4    10000.0     1550.2    10000.1     1549.5    10010.3
GR   1551.0    10014.0     1551.1    10028.0     1551.5    10037.1     1549.4    10041.3     1551.5    10045.4
GR   1552.1    10075.3     1552.7    10098.6     1552.4    10125.4     1552.8    10170.1     1553.9    10202.9
GR   1554.9    10237.5     1554.9    10261.0     1554.9    10287.4     1556.1    10306.5     1556.6    10330.6
GR   1557.3    10364.5     1557.2    10399.2     1556.9    10431.2     1556.5    10471.3     1556.8    10487.1
GR   1555.0    10507.8     1554.1    10529.5     1553.8    10548.9     1552.7    10576.2     1552.5    10609.4
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GR   1551.7    10632.5    1551.2    10644.4    1550.2    10649.1    1551.7    10653.4    1551.5    10679.1
GR   1551.9    10853.0    1551.4    10868.8    1552.2    10875.4    1552.2    10888.2    1552.5    10904.9
GR   1552.7    10919.1    1552.7    10933.2    1552.1    10953.5    1552.0    10991.4    1552.4    11004.6
GR   1550.4    11012.9    1552.1    11016.7    1552.3    11038.7    1552.4    11052.7    1552.8    11079.3
GR   1552.8    11095.7    1552.3    11101.1    1552.7    11105.5    1552.7    11117.2    1552.9    11124.9
GR   1552.6    11132.3    1553.1    11138.1    1553.6    11160.9    1554.0    11183.2    1554.1    11207.1
GR   1554.7    11239.0    1555.9    11270.7    1555.6    11297.6    1555.2    11319.9    1554.2    11347.2
GR   1554.2    11374.4    1554.6    11405.8    1553.2    11411.8    1554.2    11417.3    1554.2    11439.7
GR   1554.3    11469.4    1554.7    11507.2    1555.1    11524.9    1555.9    11554.4    1557.0    11579.4

QT       2        82        82
ET                7.1       9.1                                    10440.9    10857.0     10565    10601.1
        ADD 50 TO TRIB. 4E CROSS-SECTION I.D. NUMBERS. STA.10560=BASELINE 4E
X1   51.836        95   10585.2    10601.1       800       780       820
GR   1560.0    9502.0    1561.1     9538.5    1560.8    9577.2    1559.6     9598.2    1559.6     9610.0
GR   1557.4    9621.3    1557.6     9633.4    1559.6    9641.2    1560.4     9665.0    1560.3     9689.3
GR   1560.2    9754.5    1560.0     9767.1    1559.9    9782.2    1559.8     9795.3    1560.1     9805.8
GR   1560.1    9909.3    1559.9     9929.2    1559.9    9940.6    1558.8     9960.9    1558.8     9976.6
GR   1558.7    9989.4    1558.9    10000.0    1558.2   10000.1    1558.3    10010.4    1558.3    10015.3
GR   1557.6   10018.8    1558.9    10021.6    1558.7   10036.9    1558.6    10053.9    1559.1    10080.4
GR   1559.2   10091.4    1557.1    10100.4    1559.2   10105.2    1559.6    10118.1    1560.1    10142.6
GR   1560.3   10170.3    1561.0    10196.1    1561.5   10223.0    1561.2    10256.1    1561.0    10280.8
GR   1560.8   10299.9    1560.2    10313.1    1561.1   10328.5    1560.8    10339.9    1559.6    10347.6
GR   1561.1   10353.5    1562.1    10375.9    1562.1   10410.2    1562.4    10440.9    1562.1    10480.8
1
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GR   1560.8   10518.3    1561.2    10560.3    1560.7   10585.2    1559.3    10593.7    1561.0    10601.1
GR   1561.6   10618.9    1561.2    10647.1    1561.8   10655.4    1561.9    10655.5    1562.0    10675.8
GR   1563.9   10857.0    1563.9    10883.5    1564.2   10913.7    1564.6    10963.5    1564.3    10993.6
GR   1564.4   11008.2    1562.9    11024.7    1561.0   11051.1    1560.2    11077.0    1560.1    11101.9
GR   1559.4   11105.6    1560.2    11113.6    1560.2   11138.6    1559.8    11157.7    1560.5    11167.1
GR   1559.6   11186.9    1560.3    11209.7    1561.1   11249.0    1561.3    11274.0    1561.2    11300.9
GR   1561.1   11455.2    1561.1    11513.0    1560.9   11553.3    1561.5    11568.4    1559.7    11573.6
GR   1560.7   11577.9    1561.3    11604.1    1561.2   11619.4    1558.3    11626.6    1561.3    11631.6
GR   1561.9   11677.2    1561.6    11710.7    1561.5   11750.5    1562.4    11788.1    1563.1    11824.0

ET                7.1       9.1                                    10994.4      11506   11100.0    11226.2
        STA. 11280=BASELINE 4E.
X1   51.980        95   11158.6    11226.2       700       710       725
GR   1569.7    9534.3    1569.5     9565.5    1569.0    9596.5    1568.8     9636.6    1568.1     9680.8
GR   1567.9    9721.8    1567.1     9755.9    1566.5    9787.2    1566.3     9807.7    1566.2     9825.0
GR   1566.2    9845.7    1566.2     9859.6    1565.9    9867.3    1566.3     9878.2    1566.5     9892.9
GR   1566.8    9951.9    1566.2     9966.0    1565.9    9974.0    1563.4     9982.1    1563.8     9999.4
GR   1564.0   10000.0    1563.8    10000.1    1566.4   10003.9    1566.9    10021.3    1568.1    10045.0
GR   1568.0   10066.0    1568.6    10097.6    1568.3   10122.2    1568.0    10156.9    1567.9    10183.0
GR   1568.1   10204.7    1568.6    10213.9    1568.2   10246.3    1567.8    10280.2    1567.9    10313.5
GR   1567.9   10351.8    1567.9    10403.2    1568.0   10414.4    1566.9    10419.2    1567.8    10425.6
GR   1567.7   10448.9    1567.7    10456.5    1568.1   10482.9    1569.0    10519.4    1570.0    10552.7
GR   1570.4   10597.9    1570.0    10635.5    1569.8   10688.1    1569.2    10720.8    1569.8    10775.4
GR   1569.8   10826.6    1567.5    10832.5    1569.6   10836.9    1569.8    10873.4    1569.5    10907.0
GR   1569.8   10960.0    1570.0    10994.4    1569.0   11034.4    1569.3    11091.1    1569.3    11158.6
GR   1569.5   11226.2    1570.4    11284.9    1570.6   11313.5    1570.1    11323.7    1570.5    11351.5
GR   1572.3   11506.6    1572.9    11506.7    1572.9   11523.3    1572.9    11544.8    1572.6    11563.3
GR   1572.1   11574.0    1572.6    11582.8    1572.9   11593.5    1573.0    11608.0    1572.5    11627.1
GR   1571.8   11746.5    1571.6    11767.1    1570.1   11789.4    1570.8    11801.0    1570.7    11826.0
GR   1570.6   11918.0    1570.4    11942.5    1570.2   11963.1    1568.8    11972.6    1569.8    11979.1
GR   1569.6   11994.2    1568.6    12008.0    1567.2   12016.0    1567.2    12022.4    1569.8    12031.8
GR   1569.2   12189.6    1569.7    12220.5    1569.8   12249.8    1570.4    12277.5    1571.1    12299.7

ET                7.1       9.1                                    11691.3    12099.7    11841.4    11868.3
        STA. 11820=BASELINE 4E.
X1   52.080        25   11841.4    11868.3       580       550       580
GR   1577.6   11606.0    1577.4    11626.5    1577.4   11639.9    1578.4    11656.7    1578.8    11691.3
GR   1578.6   11714.0    1578.0    11738.1    1577.2   11763.6    1576.6    11786.7    1577.3    11795.2
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GR   1576.7    11811.3     1577.0    11835.4     1575.9    11841.4     1576.9    11846.8     1576.6    11857.9
GR   1576.1    11868.3     1576.8    11873.8     1576.4    11887.3     1577.1    11910.0     1577.6    11943.2
GR   1578.7    12099.7     1577.9    12120.4     1577.6    12132.4     1577.9    12165.8     1577.9    12194.4

ET               7.1         9.1                                       11835.9      12195    11957.8    11981.5
        STA. 11980=BASELINE 4E.
X1   52.175        20    11957.8    11981.5         520         500         520
GR   1586.2    11835.9     1585.6    11861.4     1585.0    11884.3     1584.1    11910.2     1583.9    11931.5
GR   1583.3    11949.7     1583.1    11957.8     1583.3    11970.8     1583.3    11977.1     1582.6    11981.5
GR   1583.5    12049.2     1583.3    12059.9     1583.4    12077.6     1583.7    12099.6     1583.7    12117.6
GR   1583.5    12137.1     1583.9    12146.7     1583.4    12154.9     1583.8    12174.8     1584.4    12195.3
1
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ET                           9.1                                                                  10000      10035
        STA. 10000=BASELINE 4E.
X1   52.248         7      10000      10035         375         370         370
GR     1591      9900       1590       9960        1589       10000        1588       10010       1588      10025
GR     1589     10035       1590      10090

NC     .035      .035       .035         .3          .5
        BEGIN SUN VALLEY PARKWAY CULVERT (3- 42" X 29" C.S.P.A.  -STRUC. NO. 24)
X1   52.259         4     9994.5    10005.5          60          60          60
X3       10                                                                 1593.7      1593.7
GR   1593.7     9994.5     1590.9     9994.5     1590.5    10005.5     1593.7    10005.5

NC     .024      .024       .024
SB     1.25      5.29       2.63          0          11           3        19.2          0     1591.3      1590.9
        END CULVERT (STRUC. #24)
        FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING OUTSIDE EFF. FLOW
        LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF ROAD.
X1   52.285         0          0          0         137         137         137                 0.4
X2                              1     1593.7     1594.0
X3       10                                                                 1591.3      1591.3
BT        9      9900     1597.8                 10000      1596.8                    10013.9      1596.7
BT    10014    1596.2                10054      1595.4                    10062      1595.0                 10066
BT     1594                10071       1594                 10114       1596

NC     .035      .035       .035
ET                           9.1                                                                   9992      10011
X1   52.289         6       9990      10009          20          20          20
GR     1595      9980       1594       9990        1592        9999        1592       10004       1593      10009
GR     1595     10019

NC     .049      .049       .042         .1          .3
QT        2      2240       2240
ET               7.1         9.1                                        9335      10350       9956      10065
        BEGIN TRIBUTARY 4F.  REPEAT CROSS-SECTION 1.413.
X1   -1.413        60     9973.0    10023.7         700         720         720
GR   1540.7    9335.0     1540.9     9366.6     1540.0    9413.3     1540.2     9464.7     1539.9     9517.2
GR   1539.9    9577.8     1539.9     9617.6     1539.7    9658.9     1538.8     9710.1     1538.4     9729.5
GR   1537.0    9741.0     1536.0     9753.2     1536.3    9761.1     1536.9     9769.6     1538.3     9781.5
GR   1538.4    9807.7     1538.0     9837.4     1537.8    9856.2     1536.5     9880.7     1536.1     9897.2
GR   1535.2    9913.6     1533.4     9925.0     1534.9    9933.3     1536.2     9940.2     1535.5     9949.6
GR   1534.9    9955.0     1535.7     9963.6     1534.2    9973.0     1532.8     9981.8     1532.1     9989.1
GR   1533.8    9996.8     1535.0    10000.0     1535.0   10000.1     1534.6    10007.8     1533.5    10013.9
GR   1534.7   10023.7     1534.5    10035.6     1534.8   10052.3     1535.8    10064.2     1535.5    10079.7
GR   1534.6   10083.4     1534.6    10088.6     1535.8   10094.2     1536.2    10128.1     1535.8    10145.0
GR   1535.8   10152.2     1536.6    10162.4     1536.6   10178.6     1536.9    10193.0     1536.6    10198.0
GR   1537.4   10214.8     1538.2    10234.9     1538.1   10257.0     1539.9    10278.2     1540.2    10305.9
GR   1540.4   10314.6     1540.5    10333.6     1540.7   10341.7     1540.3    10360.8     1539.7    10378.4
1
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QT        2       350       350
ET                7.1       9.1                                   10096.9    10409.6    10292.1    10331.1
        STA.  10345=BASELINE 4F.
X1   61.538        30   10292.1   10331.1       670       650       680
GR   1543.7   10065.2    1544.3   10073.1    1545.0   10078.3    1545.2   10088.9    1545.5   10096.9
GR   1544.8   10109.8    1544.2   10124.1    1544.2   10138.2    1544.2   10156.3    1543.9   10164.3
GR   1543.8   10185.9    1543.5   10205.3    1542.7   10228.7    1542.3   10269.7    1542.8   10292.1
GR   1541.9   10298.1    1539.9   10303.0    1540.7   10308.5    1542.7   10331.1    1543.1   10346.3
GR   1540.2   10354.6    1543.3   10362.3    1543.1   10374.2    1543.3   10381.4    1543.3   10391.6
GR   1544.4   10409.6    1544.0   10470.0    1543.9   10510.8    1543.9   10556.3    1543.8   10574.2

ET                7.1       9.1                                   10919.1    11270.7    10953.5    11016.7
        STA.  11000=BASELINE 4F.
X1   61.690        25   10953.5   11016.7       850       800       850
GR   1553.0   10919.1    1552.7   10933.2    1552.1   10953.5    1552.0   10991.4    1552.4   11004.6
GR   1550.4   11012.9    1552.1   11016.7    1552.3   11038.7    1552.4   11052.7    1552.8   11079.3
GR   1552.8   11095.7    1552.3   11101.1    1552.7   11105.5    1552.7   11117.2    1552.9   11124.9
GR   1552.6   11132.3    1553.1   11138.1    1553.6   11160.9    1554.0   11183.2    1554.1   11207.1
GR   1554.7   11239.0    1555.9   11270.7    1555.6   11297.6    1555.2   11319.9    1554.2   11347.2

ET                7.1       9.1                                   11568.4    11824.0      11610      11640
        STA.  11590=BASELINE 4F.
X1   61.811        20   11619.4   11631.6       680       680       680
GR   1559.6   11186.9    1560.3   11209.7    1561.1   11249.0    1561.3   11274.0    1561.2   11300.9
GR   1561.1   11455.2    1561.1   11513.0    1560.9   11553.3    1561.5   11568.4    1559.7   11573.6
GR   1560.7   11577.9    1561.3   11604.1    1561.2   11619.4    1558.3   11626.6    1559.3   11631.6
GR   1561.0   11677.2    1561.6   11710.7    1561.5   11750.5    1562.0   11788.1    1563.1   11824.0

ET                7.1       9.1                                   11746.5    12299.7      12007      12033
        STA.  12030=BASELINE 4F.
X1   61.936        20   12008.0   12031.8       660       670       700
GR   1571.8   11746.5    1571.6   11767.1    1570.1   11789.4    1570.8   11801.0    1570.7   11826.0
GR   1570.6   11918.0    1570.4   11942.5    1570.2   11963.1    1568.8   11972.6    1569.8   11979.1
GR   1569.6   11994.2    1568.6   12008.0    1567.2   12016.0    1567.2   12022.4    1569.8   12031.8
GR   1569.2   12189.6    1569.7   12220.5    1569.8   12249.8    1570.4   12277.5    1571.1   12299.7

ET                7.1       9.1                                   12313.4    12658.5    12453.2    12473.3
        STA.  12460=BASELINE 4F.
X1   62.027        16   12453.2   12473.3       490       480       490
GR   1577.7   12313.4    1576.1   12326.7    1575.5   12345.1    1573.8   12358.9    1574.3   12361.1
GR   1574.9   12372.5    1574.6   12394.8    1574.8   12417.1    1573.8   12431.0    1575.2   12444.1
GR   1574.4   12453.2    1573.2   12464.1    1575.3   12473.3    1575.2   12490.7    1575.1   12515.4
GR   1577.9   12658.5

ET                          9.1                                                        9975      10019
X1   62.074        11      9975     10019       250       250       250
GR     1582      9945      1581      9975      1580      9985      1579      9991      1579      10005
GR   1578.2     10008    1578.2     10012      1579     10014      1580     10019      1580      10040
GR     1581     10080
1
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NC     .035      .035      .035        .3        .5
        BEGIN SUN VALLEY PARKWAY CULVERT (3-8' X 3' RCB  -STRUC. NO. 25)
X1   62.087         4      9974     10013        70        70        70
X3       10                                                          1583.4    1583.4
GR   1583.2      9974    1579.7      9974    1579.7     10013    1583.2     10013

NC     .012      .012      .012
SC    3.012        .2      2.63         0         3         8       141      12.1    1580.4    1579.4
        END CULVERT (STRUC. NO. 25)
X1   62.114         0         0         0       141       141       141                 .7
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X2                          2     1583.4      1584.0
X3      10                                                                  1585.6      1585.6
BT      10       9900     1587.8                 10000      1586.7                 10022.9      1586.6
BT   10023     1586.1                 10063      1585.3                 10071      1584.9                 10077
BT   1584.5                10081      1584                  10086       1584          .          10111      1584.6
BT       0

ET                7.1        9.1                                        9981       10025       9981       10025
NC     .035       .035       .035
       ET APPLIED TO LIMIT EFF. FLOW TO WITHIN WEIR LEVEES, LEFT AND RIGHT, AS
       WELL AS 1:1 FLARE ANGLE FROM CULVERT INLET.
       FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW
       LIMITS IS POSSIBLE AND DETENTION UPSTREAM OF ROAD REQUIRES PRESERVATION.
X1   62.127         12       9981      10013         70         70         70
GR   1587.5       9695     1581.8       9703     1581.3       9860     1581.2       9962       1584       9971
GR     1584       9981       1583       9990       1582       9996       1582      10004       1583      10009
GR     1584      10013     1584.5      10025
1
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         DLOSS      L-BANK ELEV
    Q          DLOB       DCH        DROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


*PROF 1

CCHV=     .100 CEHV=     .300
*SECNO  .159
       FLOODWAY MODEL USING FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
       PREVIOUS FLOODWAY ANALYSIS BY EQUAL CONVEYANCE REDUCTION (METHOD 4).
       STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD FOR
       PROFILE 1. PROFILE 2 STARTING WSEL FORCE FED.
       CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
       CONFLUENCE WITH WASH 5 WEST ALONG BASELINE.   TRIBUTARIES TO WASH #4
       HAVE SECTION I.D.S.INCREASING UPSTREAM FROM WASH #4 CONFLUENCE WITH
       WHOLE NUMBER IN FACTOR OF 10 ADDED TO I.D. AS NOTED AT START OF TRIB.
       CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
       STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
     .159      2.10   1476.50       .00   1476.50   1476.60       .10       .00       .00   1475.80
   2275.0    1003.1     133.9    1138.0     420.8      40.2     431.1        .0        .0   1475.80
     .00      2.38      3.33      2.64      .049      .042      .049      .000   1474.40   9368.31
  .007959       0.        0.        0.         0         0         0       .00   1215.54  10583.85


*SECNO  .273

3265 DIVIDED FLOW

     .273      1.98   1481.18       .00       .00   1481.26       .08      4.65       .00   1480.90
   2275.0    1578.5     215.5     481.0     780.5      63.1     206.7      14.7      21.6   1481.20
     .08      2.02      3.42      2.33      .049      .042      .049      .000   1479.20   8336.98
  .006375     680.      630.      620.         5         0         0       .00   1639.90  10333.65


*SECNO  .417

3265 DIVIDED FLOW


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

     .417      3.52   1487.42   1487.40       .00   1487.87       .44      6.50       .11   1484.70
   2275.0     670.6     605.2     999.2     132.1      79.0     285.4      27.4      39.5   1487.80
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.12	5.08	7.66	3.50	.049	.042	.049	.000	1483.90	8686.90
.013675	710.	750.	725.	5	14	0	.00	532.95	10531.87

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

*SECNO .564

3265 DIVIDED FLOW

.564	5.81	1493.41	1493.36	.00	1493.91	.49	6.03	.02	1492.20
2275.0	901.1	1205.9	168.0	284.5	167.1	89.2	34.4	47.1	1493.00
.15	3.17	7.22	1.88	.049	.042	.049	.000	1487.60	8843.70
.008090	575.	585.	590.	7	14	0	.00	606.19	10372.29

*SECNO .689

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9281.8 10571.3 TYPE= 1 TARGET= 1289.500

.689	5.41	1500.21	.00	.00	1500.45	.24	6.52	.03	1499.80
2275.0	587.5	698.1	989.5	197.7	133.3	291.3	43.7	58.6	1498.90
.20	2.97	5.24	3.40	.049	.042	.049	.000	1494.80	9321.84
.010833	680.	710.	710.	5	0	0	.00	831.80	10557.36

*SECNO .795

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9085.4 10671.2 TYPE= 1 TARGET= 1585.800

.795	2.90	1506.10	.00	.00	1506.24	.14	5.78	.01	1505.90
2275.0	576.3	381.4	1317.3	221.1	90.3	483.8	53.1	71.4	1505.90
.26	2.61	4.23	2.72	.049	.042	.049	.000	1503.20	9116.21
.008995	500.	650.	600.	6	0	0	.00	1174.12	10638.39

*SECNO .917

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9518.4 10714.2 TYPE= 1 TARGET= 1195.800

.917	2.40	1512.20	.00	.00	1512.39	.20	6.14	.02	1512.20
2275.0	5.7	61.2	2208.1	7.2	17.5	618.6	63.6	85.1	1513.00
.31	.80	3.51	3.57	.049	.042	.049	.000	1509.80	9607.97
.010210	670.	730.	625.	5	0	0	.00	669.78	10693.61

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

```
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO 1.038

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9631.4   10587.3  TYPE=      1  TARGET=      955.899
    1.038      2.88   1518.98      .00       .00   1519.18      .19      6.78       .00   1518.90
   2275.0     235.6     139.8    1899.5     123.0      39.2     514.9      74.0      97.5   1519.00
      .36      1.92      3.57      3.69      .049      .042      .049      .000   1516.10   9653.14
  .009722      680.      705.      680.         5         0         0       .00    927.80  10584.43


*SECNO 1.167

3470 ENCROACHMENT STATIONS=     9245.1   10244.9  TYPE=      1  TARGET=      999.801
    1.167      3.52   1524.82      .00       .00   1525.17      .34      5.94       .04   1522.80
   2275.0    1096.3     694.4     484.3     327.0     101.3     144.9      83.2     108.3   1523.00
      .40      3.35      6.85      3.34      .049      .042      .049      .000   1521.30   9635.63
  .008825      635.      645.      645.         4         0         0       .00    530.40  10166.03


*SECNO 1.292

3470 ENCROACHMENT STATIONS=     9417.5   10350.0  TYPE=      1  TARGET=      932.500
    1.292      4.19   1530.69      .00       .00   1531.16      .48      5.96       .04   1529.20
   2275.0     990.7    1107.8     176.5     323.4     153.4      44.1      91.6     115.4   1528.40
      .44      3.06      7.22      4.01      .049      .042      .049      .000   1526.50   9722.42
  .008921      670.      670.      680.         4         0         0       .00    399.94  10122.36


*SECNO 1.413

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9335.0   10350.0  TYPE=      1  TARGET=     1015.000
    1.413      4.70   1536.80      .00       .00   1537.23      .44      6.07       .00   1534.20
   2240.0     545.0    1051.8     643.2     145.7     156.9     183.4      99.8     121.5   1534.70
      .48      3.74      6.70      3.51      .049      .042      .049      .000   1532.10   9743.45
  .008113      700.      720.      720.         4         0         0       .00    345.34  10202.19


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


*SECNO 1.553

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9494.9   10096.9  TYPE=      1  TARGET=      602.000
    1.553      6.05   1545.55   1545.55       .00   1546.11      .56      6.54       .04   1545.20
   1939.0     667.1     802.3     469.6     187.4      99.1     110.5     107.0     127.2   1545.30
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      .51      3.56      8.10      4.25      .049      .042      .049      .000   1539.50   9597.11
   .010583     690.      730.      720.        10        12         0       .00    364.48  10094.50


*SECNO 1.678

3470 ENCROACHMENT STATIONS=     9741.0   10364.5  TYPE=      1  TARGET=      623.500
     1.678      3.78   1553.18       .00       .00   1553.52       .35      7.40       .02   1551.90
    1939.0     737.7     700.2     501.1     214.7     109.8     143.9     114.1     133.7   1551.10
       .56      3.44      6.38      3.48      .049      .042      .049      .000   1549.40   9758.42
   .010110      710.      730.      700.         4         0         0       .00    422.96  10181.38


*SECNO 1.818

3470 ENCROACHMENT STATIONS=     9538.5   10223.0  TYPE=      1  TARGET=      684.500
     1.818      3.34   1560.44       .00       .00   1560.68       .24      7.15       .01   1558.70
    1866.0     828.1     352.3     685.5     257.7      65.5     178.5     122.3     142.3   1558.90
       .61      3.21      5.38      3.84      .049      .042      .049      .000   1557.10   9583.48
   .009326      770.      725.      700.         4         0         0       .00    592.03  10175.51


*SECNO 1.939
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9534.3   10097.6  TYPE=      1  TARGET=      563.300
     1.939      4.25   1567.65   1567.65       .00   1568.22       .58      6.63       .10   1565.90
    1866.0     937.5     866.4      62.1     268.2     106.6      22.9     129.3     149.3   1566.40
       .64      3.50      8.13      2.71      .049      .042      .049      .000   1563.40   9732.54
   .010266      680.      680.      670.         5        11         0       .00    303.53  10036.07


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


*SECNO 2.057

3470 ENCROACHMENT STATIONS=     9689.1   10356.5  TYPE=      1  TARGET=      667.400
     2.057      3.28   1573.38       .00       .00   1573.63       .25      5.38       .03   1572.00
    1825.0      13.4     557.3    1254.3       6.9      99.8     407.5     136.1     154.3   1572.70
       .69      1.93      5.59      3.08      .049      .042      .049      .000   1570.10   9953.12
   .006775      620.      670.      650.         4         0         0       .00    380.15  10333.28


*SECNO 2.148

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9768.2   10472.0  TYPE=      1  TARGET=      703.800
        PRIVATE STOCK POND DIVERSION LEVEE, 100 FT. UPSTREAM THIS SECTION.
        LEVEE ASSUMED BREACHED FOR ANALYSIS.
     2.148      4.17   1578.57   1578.57       .00   1579.10       .53      4.18       .08   1577.20
    1825.0      17.2     942.6     865.2       7.5     124.6     283.4     141.6     158.9   1577.40
       .72      2.31      7.57      3.05      .049      .042      .049      .000   1574.40   9860.16
   .009683      530.      550.      500.         3        11         0       .00    406.00  10396.75
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*SECNO 2.204

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9844.4   10350.0  TYPE=      1  TARGET=      505.600
    2.204      2.34   1581.14       .00       .00   1581.50       .37      2.39       .02   1580.00
   1825.0     385.7     589.0     850.3      83.2      89.5     255.3     143.5     160.9   1579.90
      .73      4.64      6.58      3.33      .049      .042      .049      .000   1578.80   9846.20
  .015059      200.      200.      200.         3         0         0       .00    466.84  10342.33


*SECNO 2.242

3470 ENCROACHMENT STATIONS=     9898.3   10260.3  TYPE=      1  TARGET=      362.000
    2.242      5.09   1584.59       .00       .00   1585.07       .48      3.54       .03   1582.20
   1825.0     452.4     888.0     484.6     116.1     126.5     140.1     146.3     163.6   1581.90
      .75      3.90      7.02      3.46      .049      .042      .049      .000   1579.50   9925.66
  .008793      300.      350.      280.         3         0         0       .00    332.92  10258.58


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


*SECNO 2.322

3470 ENCROACHMENT STATIONS=     9819.5   10343.2  TYPE=      1  TARGET=      523.700
    2.322      4.41   1588.81       .00       .00   1589.33       .52      4.24       .01   1586.50
   1825.0     227.1     589.1    1008.8      89.1      80.4     191.1     150.3     166.8   1586.30
      .77      2.55      7.33      5.28      .049      .042      .049      .000   1584.40   9858.89
  .009410      450.      470.      470.         4         0         0       .00    277.96  10136.85


*SECNO 2.439

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9925.7   10119.5  TYPE=      1  TARGET=      193.800
    2.439      5.52   1595.62   1595.62       .00   1596.61       .99      6.47       .14   1592.20
   1694.0     473.6     973.7     246.7      83.5     102.2      61.7     154.6     169.8   1593.50
      .79      5.67      9.53      4.00      .049      .042      .049      .000   1590.10   9946.39
  .011598      620.      620.      630.         3        11         0       .00    132.32  10083.80


*SECNO 2.523
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9897.2   10218.9  TYPE=      1  TARGET=      321.700
    2.523      5.65   1600.85   1600.85       .00   1601.73       .88      4.89       .01   1598.60
   1694.0      81.3    1083.5     529.2      21.1     122.8     116.9     157.1     171.2   1597.40
      .81      3.85      8.83      4.53      .049      .042      .049      .000   1595.20   9938.30
  .011405      425.      425.      425.         3         8         0       .00    159.86  10098.17
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*SECNO 2.621

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9892.1   10154.8  TYPE=      1  TARGET=      262.700
1
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    SECNO      DEPTH     CWSEL     CRIWS     WSELK      EG        HV        HL      OLOSS    L-BANK ELEV
    Q          QLOB      QCH       QROB      ALOB       ACH       AROB      VOL     TWA      R-BANK ELEV
    TIME       VLOB      VCH       VROB      XNL        XNCH      XNR       WTN     ELMIN    SSTA
    SLOPE      XLOBL     XLCH      XLOBR     ITRIAL     IDC       ICONT     CORAR   TOPWID   ENDST


     2.621      3.18   1607.38       .00       .00   1607.76       .38      5.98      .05   1605.10
     896.0     322.6     329.0     244.4     107.2      47.1      69.9     160.2    173.5   1605.90
       .84      3.01      6.98      3.50      .049      .042      .049      .000  1604.20   9893.66
   .009972      550.      550.      550.         3         0         0       .00   211.96  10105.62


*SECNO 2.750

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .21


3470 ENCROACHMENT STATIONS=     9973.0   10009.0  TYPE=      1  TARGET=       36.000
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN 4:1 FLARE
        ANGLE OF CULVERT OUTLET.
        FLOODPLAIN DELINEATION PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
        FLOW LIMITS IS POSSIBLE.
     2.750      2.86   1614.16       .00       .00   1614.39       .23      6.61      .02   1612.80
     151.0      17.0      82.9      51.1       8.5      18.1      17.7     162.4    175.6   1612.50
       .89      1.99      4.58      2.88      .049      .042      .049      .000  1611.30   9973.00
   .006443      750.      710.      680.         4         0         0       .00    36.00  10009.00


CCHV=     .300 CEHV=     .500
*SECNO 2.759

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1618.40 ELREA=      1618.40

        BEGIN SUN VALLEY PARKWAY CULVERT (1-10' X 3' RCB  - STRUC. NO. 16)
     2.759      1.91   1616.91   1616.91       .00   1617.88       .97       .55      .37   1618.50
     151.0        .0     151.0        .0        .0      19.1        .0     162.4    175.6   1618.50
       .90       .00      7.89       .00      .000      .035      .000      .000  1615.00   9995.00
   .022359       50.       50.       50.        20        14         0       .00    10.00  10005.00


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



SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    1         .012      .20       2.70      .00       3.00      10.00     133.00    12        1         1615.40   1615.00

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 2.784

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1618.437  EGOC =   1618.473  PCWSE=   1616.915  ELTRD=   1618.500


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.35

SPECIAL CULVERT

     EGIC      EGOC       H4      QWEIR     QCULV      VCH     ACULV     ELTRD    WEIRLN
   1618.44   1618.47      .59       0.      151.     5.999     30.0   1618.50       0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1619.80 ELREA=      1619.80

        END CULVERT (STRUC. #16)
    2.784     2.51   1617.91      .00       .00   1618.47      .56       .59       .00   1618.90
    151.0       .0     151.0       .0       .0      25.2       .0     162.5     175.6   1618.90
      .90      .00      6.00      .00      .000      .012     .000      .000   1615.40   9995.00
  .001180     133.      133.     133.        3         0        0       .00     10.00  10005.00


*SECNO 2.798

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .31


3470 ENCROACHMENT STATIONS=     9980.0   10014.0  TYPE=      1  TARGET=       34.000
        ET CARD APPLIED TO LIMIT EFFECTIVE FLOW WITHIN WEIR LEVEES LEFT AND RT.
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFFECTIVE FLOW LIMITS IS POSSIBLE AND DETENTION UPSTREAM OF
        ROAD REQUIRES PRESEVATION.
    2.798     1.56   1618.36      .00       .00   1618.73      .37       .21       .06   1669.00
    151.0       .0     151.0       .0       .0      30.7       .0     162.5     175.7 100000.00
      .91      .00      4.91      .00      .000      .035     .000      .000   1616.80   9985.75
  .011954      75.       75.      75.        4         0        0       .00     27.88  10013.63


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


CCHV=     .100 CEHV=     .300
*SECNO -2.621
START TRIB COMP
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    -2.621     2.621  1607.381

3470 ENCROACHMENT STATIONS=     9892.1   10154.8  TYPE=      1  TARGET=      262.700
       BEGIN TRIBUTARY 4A.  REPEAT CROSS-SECTION 2.621
   -2.621      3.18   1607.38       .00       .00   1607.76       .38       .00       .00   1605.10
    896.0     323.3     328.4     244.3     107.9      47.2      70.0     164.2     177.2   1605.90
      .94      3.00      6.96      3.49      .049      .042      .049      .000   1604.20   9892.37
  .009919      550.      550.      550.         0         0         0       .00    213.30  10105.67


*SECNO 12.725

3470 ENCROACHMENT STATIONS=    10250.4   10349.9  TYPE=      1  TARGET=       99.500
       ADD 10 TO TRIB. 4A CROSS-SECTION I.D. NUMBERS.   STA.10295= BASELINE 4A
       ET CARD APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1 FLARE ANGLE OF
       CULVERT OUTLET.
       FLOODPLAIN DELINEATION PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
       FLOW LIMITS IS POSSIBLE.
   12.725      2.48   1613.38       .00       .00   1613.81       .43      6.04       .01   1611.30
    766.0     253.9     160.7     351.4      58.2      22.9      72.7     166.5     179.2   1611.20
      .97      4.36      7.03      4.83      .049      .042      .049      .000   1610.90  10250.40
  .012957      575.      550.      500.         4         0         0       .00     99.50  10349.90


CCHV=     .300 CEHV=     .500
*SECNO 12.734

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1616.80 ELREA=      1616.80

       BEGIN SUN VALLEY PARKWAY CULVERT (6-12' X 4' RCB -STRUC. NO.17)
   12.734      1.57   1613.87       .00       .00   1614.49       .63       .58       .10   1616.80
    766.0        .0     766.0        .0        .0     120.6        .0     166.7     179.2   1616.80
      .97       .00      6.35       .00      .000      .035      .000      .000   1612.30   9961.50
  .012968       45.       45.       45.         2         0         0       .00     77.00  10038.50


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   06MAY93      11:42:09                                                                          PAGE   34


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


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     6         .012      .20      2.70       .00      4.00     12.00    137.00     12         1      1612.80   1612.30

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 12.760

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1615.204  EGOC =   1615.229  PCWSE=   1613.866  ELTRD=   1617.500


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.61

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
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   1615.20   1615.23      .74       0.      766.     4.802     288.0   1617.50       0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1619.00 ELREA=      1619.00

       END CULVERT (STRUC. #17)
   12.760      2.07   1614.87       .00       .00   1615.23       .36       .74       .00   1617.30
    766.0        .0     766.0        .0        .0     159.5        .0     167.1     179.5   1617.30
      .98       .00      4.80       .00      .000      .012      .000      .000   1612.80   9961.50
  .000611      137.      137.      137.         3         0         0       .00     77.00  10038.50


*SECNO 12.775
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
       ET  APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN WEIR LEVEES, LEFT AND RT.
       FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
       BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
       UPSTREAM OF ROAD.
   12.775      1.50   1617.00   1617.00       .00   1617.62       .62       .14       .13   1617.00
    766.0        .0     766.0        .0        .0     121.1        .0     167.4     179.6   1617.50
      .98       .00      6.32       .00      .000      .035      .000      .000   1615.50   9948.02
 .016984       80.       80.       80.        20        19         0       .00     98.97  10046.99


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


CCHV=     .100 CEHV=     .300
*SECNO -2.439
START TRIB COMP
     -2.439     2.439  1595.621

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9925.7   10119.5  TYPE=      1  TARGET=      193.800
       BEGIN TRIBUTARY 4B.  REPEAT CROSS-SECTION 2.439.
   -2.439      5.52   1595.62   1595.62       .00   1596.61       .99      8.05     -8.05   1592.20
   1694.0     473.6     973.7     246.7      83.5     102.2      61.7     170.0     181.3   1593.50
     1.01      5.67      9.53      4.00      .049      .042      .049      .000   1590.10   9946.39
 .011598       620.      620.      630.         0        26         0       .00    132.32  10083.80


*SECNO 22.523

3470 ENCROACHMENT STATIONS=     9897.2   10218.9  TYPE=      1  TARGET=      321.700
       ADD 20 TO TRIB. 4B. CROSS-SECTION I.D. NUMBERS. STA. 10075= BASELINE 4B
   22.523      5.74   1600.94       .00       .00   1601.54       .60      4.89       .04   1599.80
   1694.0    1357.6     314.0      22.5     216.6      50.3       9.5     172.5     182.8   1600.10
     1.02      6.27      6.24      2.38      .049      .042      .049      .000   1595.20   9919.45
 .011437       425.      425.      425.         3         0         0       .00    180.00  10099.45


*SECNO 22.617

3265 DIVIDED FLOW
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7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 10182.2 10491.6 TYPE= 1 TARGET= 309.399
STA. 10435= BASELINE 4B

22.617	3.95	1608.15	1608.15	.00	1608.54	.39	5.61	.02	1607.10
816.0	302.1	439.9	74.0	110.5	70.0	24.7	175.3	185.4	1606.20
1.05	2.73	6.29	3.00	.049	.042	.049	.000	1604.20	10219.04
.010469	515.	495.	465.	10	18	0	.00	257.83	10485.75

*SECNO 22.657
1
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 10778.8 10876.3 TYPE= 1 TARGET= 97.500
STA. 10800= BASELINE 4B
ET APPLIED TO LIMIT EFFECTIVE FLOW WITHIN 4:1 FLARE ANGLE OF CULVERT
OUTLET.
FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW LIMITS
POSSIBLE.

22.657	2.31	1610.41	.00	.00	1610.85	.44	2.30	.02	1608.20
816.0	232.9	376.4	206.7	54.3	58.7	49.6	176.2	186.2	1608.30
1.07	4.29	6.41	4.17	.049	.042	.049	.000	1608.10	10778.80
.011269	220.	210.	200.	2	0	0	.00	97.50	10876.30

CCHV= .300 CEHV= .500
*SECNO 22.669
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1614.40 ELREA= 1614.40

BEGIN SUN VALLEY PARKWAY CULVERT (6- 10' X 4' RCB - STRUC. NO. 18)

22.669	1.51	1611.41	1611.41	.00	1612.17	.76	.88	.16	1614.40
816.0	.0	816.0	.0	.0	116.4	.0	176.4	186.4	1614.40
1.07	.00	7.01	.00	.000	.035	.000	.000	1609.90	9961.50
.016554	65.	65.	65.	2	14	0	.00	77.00	10038.50

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	6	.012	.20	2.70	.00	6.00	12.00	148.00	12	3	1610.50	1609.90

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 22.697

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1612.997 EGOC = 1613.037 PCWSE= 1611.411 ELTRD= 1615.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.26

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


SPECIAL CULVERT

    EGIC      EGOC       H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
  1613.00   1613.04      .86       0.      816.     4.890     432.0   1615.00        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1617.00 ELREA=      1617.00

       END CULVERT (STRUC. #18)
       FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW
       LIMITS IS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF RD.
   22.697      2.17   1612.67       .00       .00   1613.04       .37       .86       .00   1615.00
    816.0       .0     816.0       .0        .0     166.9        .0     176.9     186.6   1615.00
     1.08       .00      4.89       .00      .000      .012      .000      .000   1610.50   9961.50
  .000598      148.      148.      148.         3         0         0       .00     77.00  10038.50


CCHV=     .100 CEHV=     .300
*SECNO -2.322
START TRIB COMP
    -2.322     2.322  1588.806

3470 ENCROACHMENT STATIONS=     9819.5   10343.2  TYPE=      1  TARGET=      523.700
       BEGIN TRIBUTARY 4C  REPEAT CROSS-SECTION 2.322
   -2.322      4.41   1588.81       .00       .00   1589.33       .52       .00       .00   1586.50
   1825.0     227.8     588.7    1008.6      89.4      80.5     191.4     179.7     188.5   1586.30
     1.10      2.55      7.32      5.27      .049      .042      .049      .000   1584.40   9858.86
  .009376      450.      470.      470.         0         0         0       .00    278.04  10136.91


*SECNO 32.418

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .17


3470 ENCROACHMENT STATIONS=    10119.5   10463.5  TYPE=      1  TARGET=      344.000
       ADD 30 TO TRIB 4C CROSS SECTION I.D. NUMBERS.  STA 10375 = BASELINE 4C
   32.418      3.35   1593.45       .00       .00   1593.51       .06      4.14       .05   1592.70
    134.0       3.1      88.9      42.0       4.1      37.9      32.6     182.3     190.7   1592.30
     1.17       .75      2.35      1.29      .049      .042      .049      .000   1590.10  10345.51
  .001817      550.      555.      480.         3         0         0       .00     89.42  10434.93
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO 32.492
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3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10250.6   10571.5  TYPE=      1  TARGET=      320.900
       STA. 10525= BASELINE 4C
   32.492      3.10   1598.30   1598.30       .00   1598.68       .38      1.68       .09   1598.80
    134.0        .0     125.8       8.2        .0      24.7       5.5     182.8     191.3   1597.90
     1.20       .00      5.10      1.49      .000      .042      .049      .000   1595.20  10497.06
  .016361      400.      415.      400.        20        12         0       .00     48.54  10545.60


*SECNO 32.558

3470 ENCROACHMENT STATIONS=    10686.2   10921.1  TYPE=      1  TARGET=      234.899
       STA. 10840= BASELINE 4C
   32.558      1.70   1603.50       .00       .00   1603.77       .27      5.08       .01   1602.60
    134.0       6.5     127.3        .2       3.1      30.1        .2     183.1     191.7   1603.20
     1.22      2.07      4.23       .99      .049      .042      .049      .000   1601.80  10831.22
  .013693      340.      340.      335.         5         0         0       .00     37.57  10868.80


*SECNO 32.575
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    11154.0   11241.2  TYPE=      1  TARGET=       87.200
       STA. 11195= BASELINE 4C
       ET APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1 FLARE ANGLE OF CULVERT.
       FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING POSSIBLE BEYOND EFF. FLOW
       LIMITS.
   32.575      1.06   1605.36   1605.36       .00   1605.66       .30      1.65       .01   1604.70
    134.0      18.2      75.8      40.0       7.2      14.8      11.5     183.1     191.8   1604.40
     1.23      2.53      5.13      3.48      .049      .042      .049      .000   1604.30  11168.84
  .023006      100.       95.       90.         3        14         0       .00     56.71  11225.55


CCHV=     .300 CEHV=     .500
*SECNO 32.584
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1611.00 ELREA=      1611.00

       BEGIN SUN VALLEY PARKWAY CULVERT (5- 12' X 4' RCB  - STRUC. NO. 19)
   32.584       .51   1606.81   1606.81       .00   1607.07       .26      1.15       .01   1610.80
    134.0        .0     134.0        .0        .0      32.9        .0     183.2     191.8   1610.80
     1.23       .00      4.07       .00      .000      .035      .000      .000   1606.30   9968.00
  .022849       50.       50.       50.         3        11         0       .00     64.00  10032.00


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     5         .012      .20      2.70       .00      4.00     12.00     135.00     12        1       1607.00   1606.30
```

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 32.610

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1607.849 EGOC = 1607.859 PCWSE= 1606.814 ELTRD= 1610.900

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.32

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1607.85	1607.86	.79	0.	134.	2.833	240.0	1610.90	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1613.30 ELREA= 1613.30

END CULVERT (STRUC. #19)
FLOODPLAIN \FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF RD.

32.610	.73	1607.73	.00	.00	1607.86	.12	.79	.00	1611.50
134.0	.0	134.0	.0	.0	47.3	.0	183.3	192.0	1611.50
1.24	.00	2.83	.00	.000	.012	.000	.000	1607.00	9968.00
.000808	135.	135.	135.	2	0	0	.00	64.00	10032.00

CCHV= .100 CEHV= .300
*SECNO -1.939
1
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

START TRIB COMP
-1.939 1.939 1567.648

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9534.3 10552.7 TYPE= 1 TARGET= 1018.400
BEGIN TRIBUTARY 4D. REPEAT CROSS-SECTION 1.939

-1.939	4.25	1567.65	.00	.00	1568.22	.57	.00	.00	1565.90
1866.0	935.0	864.0	67.0	268.2	106.6	26.1	186.8	195.0	1566.40
1.28	3.49	8.10	2.57	.049	.042	.049	.000	1563.40	9732.54
.010210	680.	680.	670.	0	0	0	.00	312.11	10424.52

*SECNO 42.070

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .16

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3470 ENCROACHMENT STATIONS=    10356.5   10782.9  TYPE=      1  TARGET=      426.400
       ADD 40 TO TRIB. 4D CROSS-SECTION I.D. NUMBERS.  STA. 10450= BESELINE 4D
   42.070      3.75   1573.85       .00       .00   1573.86       .01      5.58       .06   1572.30
     62.0       3.4      45.2      13.4       6.5      50.2      28.6     190.7     198.3   1573.80
     1.52       .52       .90       .47      .049      .042      .049      .000   1570.10  10399.88
  .000431      690.      690.      700.         4         0         0       .00    104.50  10527.37


*SECNO 42.130

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS=    10472.0   10882.3  TYPE=      1  TARGET=      410.300
       STA. 10670= BASELINE 4D.
1
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


   42.130      2.27   1576.67   1576.67       .00   1576.95       .28       .43       .08   1576.90
     62.0       1.0      60.9       .0        .8      14.2       .1     191.0     198.8   1576.70
     1.54      1.26      4.29       .05      .049      .042      .049      .000   1574.40  10647.48
  .025586      340.      320.      275.        20        14         0       .00     31.26  10797.67


*SECNO 42.200

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.06


3470 ENCROACHMENT STATIONS=    10623.4   11343.0  TYPE=      1  TARGET=      719.600
       STA. 10815= BASELINE 4D.
   42.200      1.44   1580.94       .00       .00   1581.00       .06      4.03       .02   1581.30
     62.0        .0      25.6      36.4        .0      12.4      19.4     191.2     199.1   1581.30
     1.59       .00      2.05      1.88      .000      .042      .049      .000   1579.50  10822.68
  .006001      370.      370.      370.         8         0         0       .00     53.18  10917.05


*SECNO 42.299

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .49


3470 ENCROACHMENT STATIONS=    10843.0   11129.2  TYPE=      1  TARGET=      286.200
       STA. 11030= BASELINE 4D.
   42.299      2.01   1586.41       .00       .00   1586.77       .37      5.68       .09   1587.70
     62.0        .0      62.0        .0        .0      12.7        .0     191.5     199.5   1587.10
     1.62       .00      4.87       .00      .000      .042      .000      .000   1584.40  11034.57
  .025049      515.      525.      525.         4         0         0       .00     15.31  11049.88


*SECNO 42.401
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3470 ENCROACHMENT STATIONS=    11688.0   11708.0  TYPE=      1  TARGET=       20.000
        STA. 11725= BASELINE 4D.
        ET APPLIED TO LIMIT EFF. FLOW TO WITHIN 4:1 FLARE ANGLE OF CULVERT OUTL.
        FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW LIMITS
        IS POSSIBLE.
    42.401      2.40   1597.60       .00       .00   1597.86       .26     11.07       .01   1596.60
      62.0      13.4      38.1      10.5       4.5       8.1       3.7     191.7     199.7   1596.90
      1.66      2.96      4.70      2.84      .049      .042      .049      .000   1595.20  11688.00
   .017148      540.      540.      530.         7         0         0       .00     20.00  11708.00


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   06MAY93      11:42:09                                                                                PAGE   42


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


CCHV=     .300 CEHV=     .500
*SECNO 42.406
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1602.40 ELREA=      1602.40

        BEGIN SUN VALLEY PARKWAY CULVERT (2- 42" X 29" C.S.P.A. - STRUC. NO. 22)
    42.406      1.34   1600.74   1600.74       .00   1601.42       .68       .51       .21   1602.40
      62.0        .0      62.0        .0        .0       9.4        .0     191.7     199.8   1602.40
      1.66       .00      6.60       .00      .000      .035      .000      .000   1599.40   9996.50
   .025127       25.       25.       25.        20        11         0       .00      7.00  10003.50



SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1600.32 , NOT    1600.74 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     1.25      5.29      2.63       .00      7.00      1.70      12.80       .00   1600.00   1599.40

*SECNO 42.432

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.51

PRESSURE FLOW


 EGPRS      EGLWC      H3        QWEIR     QPR       BAREA   TRAPEZOID      ELLC      ELTRD     WEIRLN
                                                                 AREA
   1602.67   1602.63       .00        0.       62.       13.       13.     1602.40   1602.90        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1604.00 ELREA=      1604.00

        END CULVERT (STRUC. #22)
        FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL UPSTREAM OF ROAD AS PONDING
        OUTSIDE OF EFF. FLOW LIMITS IS POSSIBLE AND DETENTION REQUIRES
        PRESERVATION.
    42.432      2.47   1602.47       .00       .00   1602.67       .20      1.25       .00   1603.00
      62.0        .0      62.0        .0        .0      17.3        .0     191.7     199.8   1603.00
      1.67       .00      3.58       .00      .000      .024      .000      .000   1600.00   9996.50
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   .002041      135.      135.      135.         2         0         0       .00      7.00  10003.50


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


*SECNO 42.436
    42.436      2.20   1602.70       .00       .00   1602.74       .05       .03       .05   1602.00
      62.0       4.5      52.7       4.8       6.6      28.3       6.9     191.7     199.8   1602.00
      1.68       .69      1.86       .69      .035      .035      .035      .000   1600.50   9971.16
   .001073       20.       20.       20.         2         0         0       .00     56.73  10027.89


CCHV=     .100 CEHV=     .300
*SECNO -1.678
START TRIB COMP
     -1.678     1.678  1553.178

3470 ENCROACHMENT STATIONS=     9741.0   10364.5  TYPE=      1  TARGET=      623.500
        BEGIN TRIBUTARY 4E.  REPEAT CROSS-SECTION 1.678.
    -1.678      3.78   1553.18       .00       .00   1553.52       .35       .00       .00   1551.90
    1939.0     737.7     700.2     501.1     214.7     109.8     143.9     195.9     203.7   1551.10
      1.72      3.44      6.38      3.48      .049      .042      .049      .000   1549.40   9758.42
   .010110      710.      730.      700.         0         0         0       .00    422.96  10181.38


*SECNO 51.836

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .06


3470 ENCROACHMENT STATIONS=    10440.9   10857.0  TYPE=      1  TARGET=      416.100
        ADD 50 TO TRIB. 4E CROSS-SECTION I.D. NUMBERS. STA.10560=BASELINE 4E
    51.836      4.22   1561.32       .00       .00   1561.41       .08      7.86       .03   1560.70
      82.0      26.1      54.8       1.1      26.6      19.9       2.1     200.6     208.6   1561.00
      1.82       .98      2.76       .51      .049      .042      .049      .000   1557.10  10503.29
   .004629      800.      820.      780.         2         0         0       .00    117.44  10648.76


*SECNO 51.980
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10994.4   11506.0  TYPE=      1  TARGET=      511.600
        STA. 11280=BASELINE 4E.
    51.980      6.10   1569.50   1569.50       .00   1569.55       .06      6.27       .00   1569.30
      82.0      74.5       7.5        .0      37.9       6.6        .0     201.4     211.3   1569.50
      1.93      1.96      1.15       .00      .049      .042      .000      .000   1563.40  11014.52
   .023060      700.      725.      710.         4        11         0       .00    210.69  11225.21


1
   06MAY93      11:42:09                                                                                    PAGE   44


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


*SECNO 52.080

3265 DIVIDED FLOW


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


3470 ENCROACHMENT STATIONS=    11691.3   12099.7  TYPE=      1  TARGET=      408.400
       STA. 11820=BASELINE 4E.
   52.080     1.18   1577.08      .00      .00   1577.13      .05     7.57      .00   1575.90
     82.0     21.3      32.5     28.1     16.9      14.9     17.3    202.0    213.6   1576.10
     2.02     1.26      2.19     1.62     .049      .042     .049     .000  1575.90  11768.32
  .008513     580.      580.     550.        8         0        0      .00   132.26  11909.26


*SECNO 52.175

3265 DIVIDED FLOW


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


3470 ENCROACHMENT STATIONS=    11835.9   12195.0  TYPE=      1  TARGET=      359.100
       STA. 11980=BASELINE 4E.
   52.175      .84   1583.44      .00      .00   1583.52      .08     6.38      .01   1583.10
     82.0      3.4      12.6     66.0      2.2       6.1     28.7    202.5    215.1   1582.60
     2.08     1.54      2.05     2.30     .049      .042     .049     .000  1582.60  11945.47
  .020336     520.      520.     500.        5         0        0      .00   129.80  12156.86


*SECNO 52.248
       STA. 10000=BASELINE 4E.
   52.248     1.03   1589.03      .00      .00   1589.18      .15     5.64      .02   1589.00
     82.0       .0      82.0       .0       .0      26.0       .0    202.8    215.8   1589.00
     2.12      .03      3.15      .03     .049      .042     .049     .000  1588.00   9998.84
  .011829     375.      370.     370.        4         0        0      .00    37.76  10036.60


CCHV=     .300 CEHV=     .500
*SECNO 52.259
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
1
   06MAY93      11:42:09                                                                    PAGE   45


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


3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1593.70 ELREA=      1593.70

       BEGIN SUN VALLEY PARKWAY CULVERT (3- 42" X 29" C.S.P.A.  -STRUC. NO. 24)
   52.259     1.40   1591.90   1591.90      .00   1592.50      .60      .95      .22   1593.70
     82.0       .0      82.0       .0       .0      13.1       .0    202.8    215.8   1593.70
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      2.12       .00      6.24       .00      .000      .035      .000      .000   1590.50   9994.50
   .022134       60.       60.       60.        20        11         0       .00     11.00  10005.50


SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1591.70 , NOT    1591.90 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     1.25      5.29      2.63       .00     11.00      3.00     19.20       .00   1591.30   1590.90

*SECNO 52.285

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.30

CLASS B LOW FLOW

3420 BRIDGE W.S.=    1592.58 BRIDGE VELOCITY=       6.92     CALCULATED CHANNEL AREA=        10.

 EGPRS      EGLWC       H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC      ELTRD     WEIRLN
                                                                 AREA
       .00   1593.69      .00        0.       82.       19.       19.     1593.70   1594.00        0.


        END CULVERT (STRUC. #24)
        FLOOPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING OUTSIDE EFF. FLOW
        LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF ROAD.
    52.285      2.65   1593.55       .00       .00   1593.69       .14      1.19       .00   1594.10
      82.0        .0      82.0        .0        .0      26.9        .0     202.9     215.9   1594.10
      2.13       .00      3.04       .00      .000      .024      .000      .000   1590.90   9994.50
   .001196      137.      137.      137.         0         0         0       .00     11.00  10005.50


*SECNO 52.289
1
   06MAY93      11:42:09                                                                                    PAGE   46


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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .34

    52.289      1.52   1593.52       .00       .00   1593.83       .31       .05       .08   1594.00
      82.0        .0      80.8       1.2        .0      18.1        .7     202.9     215.9   1593.00
      2.13       .00      4.46      1.76      .000      .035      .035      .000   1592.00   9992.11
   .010285       20.       20.       20.         2         0         0       .00     19.55  10011.66


CCHV=     .100 CEHV=     .300
*SECNO -1.413
START TRIB COMP
    -1.413     1.413  1536.799

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9335.0   10350.0  TYPE=      1  TARGET=     1015.000
        BEGIN TRIBUTARY 4F.  REPEAT CROSS-SECTION 1.413.
    -1.413      4.70   1536.80       .00       .00   1537.23       .44       .00       .00   1534.20
    2240.0     544.9    1051.9     643.2     145.7     156.9     183.4     207.0     218.9   1534.70
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     2.17      3.74      6.70      3.51      .049      .042      .049      .000   1532.10   9743.45
  .008114      700.      720.      720.         0         0         0       .00    345.32  10202.18


*SECNO 61.538

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .11


3470 ENCROACHMENT STATIONS=    10096.9   10409.6  TYPE=      1  TARGET=      312.699
       STA.  10345=BASELINE 4F.
   61.538      2.86   1542.76   1542.71       .00   1543.12       .35      5.87       .01   1542.80
    350.0      23.7     251.4      74.9      15.7      49.2      17.7     211.4     222.4   1542.70
     2.21      1.51      5.11      4.24      .049      .042      .049      .000   1539.90  10226.83
  .015472      670.      680.      650.         7        14         0       .00    118.56  10360.97


*SECNO 61.690
1
  06MAY93      11:42:09                                                                          PAGE   47


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


3470 ENCROACHMENT STATIONS=    10919.1   11270.7  TYPE=      1  TARGET=      351.601
       STA.  11000=BASELINE 4F.
   61.690      2.57   1552.97       .00       .00   1553.12       .14      9.98       .02   1552.10
    350.0      25.7     227.9      96.4      13.6      65.3      50.7     213.4     225.6   1552.10
     2.29      1.88      3.49      1.90      .049      .042      .049      .000   1550.40  10920.01
  .009453      850.      850.      800.         7         0         0       .00    216.70  11136.71


*SECNO 61.811

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    11568.4   11824.0  TYPE=      1  TARGET=      255.600
       STA.  11590=BASELINE 4F.
   61.811      2.84   1561.14       .00       .00   1561.54       .39      8.34       .08   1561.20
    350.0      30.5     142.1     177.4      11.5      21.8      46.1     215.0     228.0   1559.30
     2.33      2.66      6.52      3.85      .049      .042      .049      .000   1558.30  11569.42
  .016562      680.      680.      680.         6         0         0       .00     93.87  11685.41


*SECNO 61.936
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    11746.5   12299.7  TYPE=      1  TARGET=      553.200
       STA.  12030=BASELINE 4F.
   61.936      2.65   1569.85   1569.85       .00   1570.09       .23      7.62       .02   1568.60
    350.0      38.0     217.1      94.9      20.0      45.3      70.9     216.7     231.0   1569.80
     2.38      1.90      4.79      1.34      .049      .042      .049      .000   1567.20  11965.46
  .007991      660.      700.      670.         5         9         0       .00    286.71  12252.17


*SECNO 62.027
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3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 12313.4 12658.5 TYPE= 1 TARGET= 345.100

1

STA. 12460=BASELINE 4F.

62.027	2.06	1575.26	1575.23	.00	1575.51	.25	5.42	.00	1574.40
350.0	214.5	132.5	3.0	70.2	25.2	3.7	218.0	233.5	1575.30
2.42	3.05	5.25	.82	.049	.042	.049	.000	1573.20	12347.04
.016431	490.	490.	480.	17	14	0	.00	169.51	12523.60

*SECNO 62.074

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

62.074	2.36	1580.56	1580.56	.00	1581.01	.45	4.20	.06	1581.00
350.0	.0	307.8	42.2	.0	54.2	18.0	218.5	234.2	1580.00
2.43	.00	5.68	2.35	.000	.042	.049	.000	1578.20	9979.42
.017175	250.	250.	250.	18	8	0	.00	82.91	10062.33

CCHV= .300 CEHV= .500

*SECNO 62.087

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.42

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1583.40 ELREA= 1583.40

BEGIN SUN VALLEY PARKWAY CULVERT (3-8' X 3' RCB -STRUC. NO. 25)

62.087	1.70	1581.40	.00	.00	1581.84	.43	.82	.01	1583.20
350.0	.0	350.0	.0	.0	66.3	.0	218.6	234.3	1583.20
2.44	.00	5.28	.00	.000	.035	.000	.000	1579.70	9974.00
.008536	70.	70.	70.	2	0	0	.00	39.00	10013.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	CDFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.012	.20	2.63	.00	3.00	8.00	141.00	12	1	1580.40	1579.40

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 62.114

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1583.368 EGOC = 1583.393 PCWSE= 1581.402 ELTRD= 1584.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 6.63

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1583.37	1583.39	1.56	0.	350.	3.162	72.0	1584.00	0.

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



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1585.60 ELREA=      1585.60

        END CULVERT (STRUC. NO. 25)
   62.114      2.84   1583.24       .00       .00   1583.39       .16      1.56       .00   1583.90
    350.0       .0     350.0       .0       .0     110.7       .0     218.9     234.4   1583.90
     2.45       .00      3.16       .00      .000      .012      .000      .000   1580.40   9974.00
  .000194      141.      141.      141.        2         0         0       .00     39.00  10013.00


*SECNO 62.127

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=     9981.0   10025.0  TYPE=      1  TARGET=       44.000
        ET APPLIED TO LIMIT EFF. FLOW TO WITHIN WEIR LEVEES, LEFT AND RIGHT, AS
        WELL AS 1:1 FLARE ANGLE FROM CULVERT INLET.
        FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW
        LIMITS IS POSSIBLE AND DETENTION UPSTREAM OF ROAD REQUIRES PRESERVATION.
   62.127      3.16   1584.36   1584.36       .00   1585.09       .73       .04       .29   1584.00
    350.0       .0     347.4      2.6       .0      50.6      1.6     219.0     234.5   1584.00
     2.45       .00      6.86      1.64      .000      .035      .035      .000   1581.20   9981.00
  .014611      70.       70.       70.        20         8         0       .00     40.71  10021.71
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T1      SUN VALLEY PARKWAY NORTH FIS   CONTRACT:FCDMC NO. 90-04
T2      100-YEAR WATER SURFACE PROFILE                    A-N WEST INC. PHX.AZ
T3      WASH #4 FLOODWAY

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

    -10        3                            0                                    1477.5

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

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


*PROF 2
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0

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CCHV=     .100 CEHV=     .300
*SECNO  .159

3470 ENCROACHMENT STATIONS=     9810.0   10163.0  TYPE=      1  TARGET=      353.000
        FLOODWAY MODEL USING FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
        PREVIOUS FLOODWAY ANALYSIS BY EQUAL CONVEYANCE REDUCTION (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD FOR
        PROFILE 1. PROFILE 2 STARTING WSEL FORCE FED.
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH 5 WEST ALONG BASELINE.   TRIBUTARIES TO WASH #4
        HAVE SECTION I.D.S.INCREASING UPSTREAM FROM WASH #4 CONFLUENCE WITH
        WHOLE NUMBER IN FACTOR OF 10 ADDED TO I.D. AS NOTED AT START OF TRIB.
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
      .159      3.10   1477.50       .00   1476.50   1477.75       .25       .00       .00   1475.80
    2275.0     673.9     394.7    1206.5     167.5      77.0     335.9        .0        .0   1475.80
       .00      4.02      5.12      3.59      .049      .042      .049      .000   1474.40   9810.00
   .007930        0.        0.        0.         0         0         0       .00    353.00  10163.00


*SECNO  .273

3470 ENCROACHMENT STATIONS=     9700.0   10230.0  TYPE=      1  TARGET=      530.000
      .273      2.67   1481.87       .00   1481.18   1482.04       .16      4.28       .01   1480.90
    2275.0     842.0     407.3    1025.7     331.0      95.8     312.7       9.8       6.6   1481.20
       .06      2.54      4.25      3.28      .049      .042      .049      .000   1479.20   9700.00
   .005675      680.      630.      620.         5         0         0       .00    530.00  10230.00


*SECNO  .417
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9950.0   10230.0  TYPE=      1  TARGET=      280.000
      .417      4.53   1488.43   1488.43   1487.42   1489.09       .66      5.79       .15   1484.70
    2275.0     154.8     957.6    1162.6      38.0     109.4     276.0      19.4      13.3   1487.80
       .09      4.07      8.76      4.21      .049      .042      .049      .000   1483.90   9950.00
   .011873      710.      750.      725.         2        14         0       .00    280.00  10230.00


1
   06MAY93      11:42:09                                                                          PAGE   52


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


*SECNO  .564
3280 CROSS SECTION       .56 EXTENDED       .40 FEET


3470 ENCROACHMENT STATIONS=     9900.0   10140.0  TYPE=      1  TARGET=      240.000
      .564      6.60   1494.20   1494.01   1493.41   1495.16       .96      5.98       .09   1492.20
    2275.0     478.6     1774.7      21.6     119.5     204.8       7.5      24.5      16.3   1493.00
       .11      4.01      8.67      2.87      .049      .042      .049      .000   1487.60   9964.61
   .008893      575.      585.      590.         7        11         0       .00    175.39  10140.00


*SECNO  .689

3301 HV CHANGED MORE THAN HVINS
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3470 ENCROACHMENT STATIONS=     9906.0   10195.2  TYPE=      1  TARGET=      289.200
      .689      6.27   1501.07      .00   1500.21   1501.48      .42      6.26      .05   1499.80
    2275.0    1054.0    1221.0       .0     278.8     199.2       .0      31.0     20.0 100000.00
      .15      3.78      6.13      .00      .049      .042     .000      .000   1494.80   9906.00
   .009010      680.      710.     710.         4         0        0       .00    289.20  10195.20


*SECNO  .795

3470 ENCROACHMENT STATIONS=     9924.2   10223.0  TYPE=      1  TARGET=      298.800
      .795      3.74   1506.94      .00   1506.10   1507.34      .40      5.85      .00   1505.90
    2275.0     121.3     894.7    1259.0      38.6     142.9    300.1      37.4     23.8   1505.90
      .18      3.15      6.26      4.20      .049      .042     .049      .000   1503.20   9924.20
   .010698      500.      650.     600.         5         0        0       .00    298.80  10223.00


*SECNO  .917
3280 CROSS SECTION       .92 EXTENDED       .44 FEET


3470 ENCROACHMENT STATIONS=     9908.2   10325.0  TYPE=      1  TARGET=      416.800
      .917      3.44   1513.24      .00   1512.20   1513.47      .23      6.12      .02   1512.20
    2275.0        .0     311.3    1963.7        .0      95.4    496.6      45.4     29.2   1513.00
      .23       .00      3.26      3.95      .000      .042     .049      .000   1509.80   9908.20
   .008250      670.      730.     625.         5         0        0       .00    416.80  10325.00


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   06MAY93      11:42:09                                                                          PAGE   53


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


*SECNO 1.038

3470 ENCROACHMENT STATIONS=     9962.5   10239.8  TYPE=      1  TARGET=      277.300
     1.038      3.87   1519.97      .00   1518.98   1520.36      .39      6.84      .05   1518.90
    2275.0        .0     467.2    1807.8        .0      76.2    385.0      53.7     34.6   1519.00
      .27       .00      6.14      4.70      .000      .042     .049      .000   1516.10   9962.50
   .012361      680.      705.     680.         4         0        0       .00    277.30  10239.80


*SECNO 1.167

3470 ENCROACHMENT STATIONS=     9984.4   10163.6  TYPE=      1  TARGET=      179.199
     1.167      4.50   1525.80      .00   1524.82   1526.33      .53      5.92      .04   1522.80
    2275.0     109.1     991.8    1174.1      25.1     134.0    278.1      60.3     38.0   1523.00
      .30      4.35      7.40      4.22      .049      .042     .049      .000   1521.30   9984.40
   .007093      635.      645.     645.         4         0        0       .00    179.20  10163.60


*SECNO 1.292

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9989.0   10084.9  TYPE=      1  TARGET=       95.900
     1.292      4.96   1531.46      .00   1530.69   1532.58     1.13      6.08      .18   1529.20
    2275.0     512.8    1762.2        .0      97.0     190.5       .0      65.9     40.1 100000.00
      .32      5.29      9.25      .00      .049      .042     .000      .000   1526.50   9989.00
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   .011907      670.      670.      680.         3         0         0       .00     95.90  10084.90


*SECNO 1.413

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9956.0   10065.0  TYPE=      1  TARGET=      109.000
     1.413      5.74   1537.84       .00   1536.80   1538.44       .60      5.80       .05   1534.20
    2240.0     192.5    1449.8     597.7      46.2     210.0     124.0      71.4      41.8   1534.70
       .35      4.16      6.90      4.82      .049      .042      .049      .000   1532.10   9956.00
   .005832      700.      720.      720.         3         0         0       .00    109.00  10065.00


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   06MAY93      11:42:09                                                                                PAGE   54


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


*SECNO 1.553

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=     9966.1   10068.0  TYPE=      1  TARGET=      101.900
     1.553      6.55   1546.05   1546.05   1545.55   1547.26      1.21      6.21       .18   1545.20
    1939.0        .0    1163.6     775.4        .0     112.8     130.3      76.6      43.6   1545.30
       .38       .00     10.32      5.95      .000      .042      .049      .000   1539.50   9966.10
   .015015      690.      730.      720.        20        11         0       .00    101.90  10068.00


*SECNO 1.678

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9980.0   10100.0  TYPE=      1  TARGET=      120.000
     1.678      4.79   1554.19       .00   1553.18   1554.78       .58      7.45       .06   1551.90
    1939.0      19.7    1087.5     831.8       6.4     155.7     173.0      81.3      45.4   1551.10
       .41      3.09      6.98      4.81      .049      .042      .049      .000   1549.40   9980.00
   .007602      710.      730.      700.         6         0         0       .00    120.00  10100.00


*SECNO 1.818

3470 ENCROACHMENT STATIONS=     9949.8   10063.3  TYPE=      1  TARGET=      113.500
     1.818      4.07   1561.17       .00   1560.44   1561.89       .71      7.07       .04   1558.70
    1866.0     541.4     697.0     627.7      90.9      88.8     102.2      86.4      47.3   1558.90
       .44      5.95      7.85      6.14      .049      .042      .049      .000   1557.10   9949.80
   .013241      770.      725.      700.         4         0         0       .00    113.50  10063.30
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*SECNO 1.939

3470 ENCROACHMENT STATIONS=     9899.1   10003.9  TYPE=      1  TARGET=      104.801
    1.939      5.18   1568.58       .00   1567.65   1569.44       .86      7.51       .04   1565.90
   1866.0     698.4    1167.6        .0     150.8     134.5        .0      90.8      49.0 100000.00
      .47      4.63      8.68       .00      .049      .042      .000      .000   1563.40   9899.10
  .009394      680.      680.      670.         4         0         0       .00    104.80  10003.90


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   06MAY93      11:42:09                                                                          PAGE   55


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


*SECNO 2.057

3470 ENCROACHMENT STATIONS=     9963.2   10097.8  TYPE=      1  TARGET=      134.600
    2.057      4.12   1574.22       .00   1573.38   1574.67       .45      5.19       .04   1572.00
   1825.0        .0     837.7     987.3        .0     130.5     226.9      95.7      50.8   1572.70
      .50       .00      6.42      4.35      .000      .042      .049      .000   1570.10   9963.20
  .006755      620.      670.      650.         4         0         0       .00    134.60  10097.80


*SECNO 2.148

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9871.0    9950.0  TYPE=      1  TARGET=       79.000
       PRIVATE STOCK POND DIVERSION LEVEE, 100 FT. UPSTREAM THIS SECTION.
       LEVEE ASSUMED BREACHED FOR ANALYSIS.
    2.148      4.57   1578.97   1578.97   1578.57   1580.27      1.30      5.19       .25   1577.20
   1825.0        .0    1394.4     430.6        .0     139.6      76.2      99.1      52.0   1577.40
      .52       .00      9.99      5.65      .000      .042      .049      .000   1574.40   9871.00
  .015390      530.      550.      500.         2         8         0       .00     79.00   9950.00


*SECNO 2.204

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9900.0   10040.0  TYPE=      1  TARGET=      140.000
    2.204      3.32   1582.12       .00   1581.14   1582.62       .51      2.28       .08   1580.00
   1825.0     102.4     904.4     818.1      24.1     136.2     174.7     100.4      52.6   1579.90
      .53      4.25      6.64      4.68      .049      .042      .049      .000   1578.80   9900.00
  .008750      200.      200.      200.         2         0         0       .00    140.00  10040.00


*SECNO 2.242

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    10025.5   10089.1  TYPE=      1  TARGET=       63.600
1
   06MAY93      11:42:09                                                                          PAGE   56
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


     2.242      5.63    1585.13        .00    1584.59    1586.32       1.19       3.50        .20    1582.20
    1825.0        .0     1372.7      452.3        .0      148.1       64.8      102.4       53.3    1581.90
       .54       .00       9.27       6.98       .000       .042       .049       .000    1579.50   10025.50
   .013609      300.       350.       280.          2          0          0        .00      63.60   10089.10


*SECNO 2.322

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9980.0   10080.0  TYPE=      1  TARGET=      100.000
     2.322      5.23    1589.63        .00    1588.81    1590.09        .46       3.69        .07    1586.50
    1825.0     125.0      635.9     1064.1       32.7      101.0      211.1      105.4       54.2    1586.30
       .56      3.83       6.29       5.04       .049       .042       .049       .000    1584.40    9980.00
   .005122      450.       470.       470.          3          0          0        .00     100.00   10080.00


*SECNO 2.439

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=     9993.0   10032.5  TYPE=      1  TARGET=       39.500
     2.439      6.13    1596.23    1596.23    1595.62    1598.19       1.95       5.33        .45    1592.20
    1694.0        .0     1390.4      303.6        .0      117.2       40.1      109.0       55.2    1593.50
       .58       .00      11.87       7.57       .000       .042       .049       .000    1590.10    9993.00
   .018176      620.       620.       630.         20         11          0        .00      39.50   10032.50


*SECNO 2.523
3280 CROSS SECTION      2.52 EXTENDED       .47 FEET


3301 HV CHANGED MORE THAN HVINS

1
   06MAY93      11:42:09                                                                                    PAGE   57


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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.87


3470 ENCROACHMENT STATIONS=     9952.0   10081.3  TYPE=      1  TARGET=      129.300
     2.523      6.37    1601.57        .00    1600.85    1602.07        .50       3.74        .15    1598.60
    1694.0      57.1      992.5     644.4       16.9      147.7      173.5      111.4       56.0    1597.40
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      .60      3.37      6.72      3.71      .049      .042      .049      .000   1595.20   9952.00
  .005171      425.      425.      425.         3         0         0       .00    129.30  10081.30


*SECNO 2.621
3280 CROSS SECTION      2.62 EXTENDED       .35 FEET


3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=    10012.0   10056.0  TYPE=      1  TARGET=       44.000
    2.621      3.65   1607.85   1607.85   1607.38   1609.03      1.19      3.97       .21   1605.10
    896.0       7.4     550.4     338.2       2.4      54.9      54.2     114.2      57.1   1605.90
      .62      3.06     10.03      6.24      .049      .042      .049      .000   1604.20  10012.00
  .016810      550.      550.      550.        20        11         0       .00     44.00  10056.00


*SECNO 2.750
3280 CROSS SECTION      2.75 EXTENDED       .82 FEET


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9973.0   10009.0  TYPE=      1  TARGET=       36.000
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN 4:1 FLARE
       ANGLE OF CULVERT OUTLET.
       FLOODPLAIN DELINEATION PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
       FLOW LIMITS IS POSSIBLE.
1
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    SECNO      DEPTH     CWSEL     CRIWS     WSELK      EG        HV        HL     OLOSS    L-BANK ELEV
    Q          QLOB      QCH       QROB      ALOB       ACH       AROB      VOL    TWA      R-BANK ELEV
    TIME       VLOB      VCH       VROB      XNL        XNCH      XNR       WTN    ELMIN    SSTA
    SLOPE      XLOBL     XLCH      XLOBR     ITRIAL     IDC       ICONT     CORAR  TOPWID   ENDST


    2.750      3.82   1615.12       .00   1614.16   1615.18       .07      6.04       .11   1612.80
    151.0      30.5      65.6      54.8      21.8      26.2      31.0     115.8      57.7   1612.50
      .71      1.40      2.51      1.77      .049      .042      .049      .000   1611.30   9973.00
  .001183      750.      710.      680.         5         0         0       .00     36.00  10009.00


CCHV=     .300 CEHV=     .500
*SECNO 2.759

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1618.40 ELREA=      1618.40

       BEGIN SUN VALLEY PARKWAY CULVERT (1-10' X 3' RCB  - STRUC. NO. 16)
    2.759      1.92   1616.92   1616.92   1616.91   1617.88       .96       .16       .45   1618.50
    151.0        .0     151.0        .0        .0      19.2        .0     115.8      57.7   1618.50
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      .72       .00      7.88       .00      .000      .035      .000      .000   1615.00   9995.00
  .022308       50.       50.       50.        20         8         0       .00     10.00  10005.00


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    1         .012      .20       2.70      .00       3.00      10.00     133.00    12        1         1615.40   1615.00

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 2.784

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1618.437  EGOC =   1618.473  PCWSE=   1616.916  ELTRD=   1618.500


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.35

SPECIAL CULVERT

     EGIC      EGOC       H4     QWEIR     QCULV      VCH     ACULV     ELTRD    WEIRLN
   1618.44   1618.47      .59       0.      151.    5.999      30.0   1618.50        0.


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   06MAY93      11:42:09                                                                                    PAGE   59


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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1619.80 ELREA=      1619.80

        END CULVERT (STRUC. #16)
     2.784      2.51   1617.91       .00   1617.91   1618.47       .56       .59       .00   1618.90
     151.0        .0     151.0        .0        .0      25.2        .0     115.9      57.8   1618.90
       .72       .00      6.00       .00      .000      .012      .000      .000   1615.40   9995.00
   .001180      133.      133.      133.         3         0         0       .00     10.00  10005.00


*SECNO 2.798

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .31


3470 ENCROACHMENT STATIONS=     9980.0   10014.0  TYPE=      1  TARGET=       34.000
        ET CARD APPLIED TO LIMIT EFFECTIVE FLOW WITHIN WEIR LEVEES LEFT AND RT.
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFFECTIVE FLOW LIMITS IS POSSIBLE AND DETENTION UPSTREAM OF
        ROAD REQUIRES PRESEVATION.
     2.798      1.56   1618.36       .00   1618.36   1618.73       .37       .21       .06   1669.00
     151.0        .0     151.0        .0        .0      30.7        .0     115.9      57.8 100000.00
       .73       .00      4.91       .00      .000      .035      .000      .000   1616.80   9985.75
   .011961       75.       75.       75.         4         0         0       .00     27.88  10013.63


CCHV=     .100 CEHV=     .300
*SECNO -2.621
START TRIB COMP
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    -2.621     2.621  1607.847
3280 CROSS SECTION     -2.62 EXTENDED       .35 FEET


3470 ENCROACHMENT STATIONS=    10012.9   10055.2  TYPE=      1  TARGET=       42.300
       BEGIN TRIBUTARY 4A.  REPEAT CROSS-SECTION 2.621
   -2.621      3.65   1607.85       .00   1607.38   1609.03      1.18       .00       .00   1605.10
    896.0        .0     537.2     358.8        .0      54.9      52.8     116.8      58.3   1605.90
      .74       .00      9.79      6.80      .000      .042      .049      .000   1604.20  10012.90
  .019556      550.      550.      550.         0         0         0       .00     42.30  10055.20


*SECNO 12.725
1
   06MAY93      11:42:09                                                                                    PAGE   60


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



3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.67


3470 ENCROACHMENT STATIONS=    10250.4   10349.9  TYPE=      1  TARGET=       99.500
       ADD 10 TO TRIB. 4A CROSS-SECTION I.D. NUMBERS.   STA.10295= BASELINE 4A
       ET CARD APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1 FLARE ANGLE OF
       CULVERT OUTLET.
       FLOODPLAIN DELINEATION PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
       FLOW LIMITS IS POSSIBLE.
   12.725      3.02   1613.92       .00   1613.38   1614.15       .23      5.03       .10   1611.30
    766.0     273.7     142.9     349.4      82.2      28.2      96.6     118.7      59.1   1611.20
      .78      3.33      5.07      3.62      .049      .042      .049      .000   1610.90  10250.40
  .005119      575.      550.      500.         6         0         0       .00     99.50  10349.90


CCHV=     .300 CEHV=     .500
*SECNO 12.734

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1616.80 ELREA=      1616.80

       BEGIN SUN VALLEY PARKWAY CULVERT (6-12' X 4' RCB -STRUC. NO.17)
   12.734      1.78   1614.08       .00   1613.87   1614.56       .48       .29       .13   1616.80
    766.0        .0     766.0        .0        .0     137.8        .0     118.9      59.2   1616.80
      .79       .00      5.56       .00      .000      .035      .000      .000   1612.30   9961.50
  .008387       45.       45.       45.         2         0         0       .00     77.00  10038.50



SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     CDFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    6         .012      .20       2.70      .00       4.00      12.00     137.00    12        1         1612.80   1612.30

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 12.760

SPECIAL CULVERT OUTLET CONTROL
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EGIC =   1615.204  EGOC =   1615.225  PCWSE=   1614.084  ELTRD=   1617.500


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.69

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


SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV    ELTRD    WEIRLN
   1615.20   1615.22       .66       0.      766.     4.816     288.0   1617.50       0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1619.00 ELREA=      1619.00

        END CULVERT (STRUC. #17)
    12.760      2.06   1614.86       .00   1614.87   1615.22       .36       .66       .00   1617.30
     766.0        .0     766.0        .0        .0     159.0        .0     119.4      59.5   1617.30
       .79       .00      4.82       .00      .000      .012      .000      .000   1612.80   9961.50
   .000616      137.      137.      137.         3         0         0       .00     77.00  10038.50


*SECNO 12.775
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9948.0   10047.0  TYPE=      1  TARGET=       99.000
        ET  APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN WEIR LEVEES, LEFT AND RT.
        FLOODPLAIN\FLOODWAY DELINEATIONS PLOTTED BASED ON WSEL AS PONDING
        BEYOND EFF. FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION
        UPSTREAM OF ROAD.
    12.775      1.50   1617.00   1617.00   1617.00   1617.62       .62       .14       .13   1667.00
     766.0        .0     766.0        .0        .0     121.1        .0     119.6      59.6 100000.00
       .80       .00      6.32       .00      .000      .035      .000      .000   1615.50   9948.02
   .016974       80.       80.       80.        20        19         0       .00     98.97  10046.99


CCHV=     .100 CEHV=     .300
*SECNO -2.439
START TRIB COMP
    -2.439     2.439  1596.234

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9993.0   10032.5  TYPE=      1  TARGET=       39.500
        BEGIN TRIBUTARY 4B.  REPEAT CROSS-SECTION 2.439.
    -2.439      6.13   1596.23   1596.23   1595.62   1598.19      1.95     11.04    -11.04   1592.20
    1694.0        .0    1390.4     303.6        .0     117.2      40.1     121.6      60.6   1593.50
       .81       .00     11.87      7.57      .000      .042      .049      .000   1590.10   9993.00
   .018176      620.      620.      630.         0        26         0       .00     39.50  10032.50


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


*SECNO 22.523
3280 CROSS SECTION     22.52 EXTENDED       .10 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.89


3470 ENCROACHMENT STATIONS=     9952.0   10081.3  TYPE=      1  TARGET=      129.300
       ADD 20 TO TRIB. 4B. CROSS-SECTION I.D. NUMBERS. STA. 10075= BASELINE 4B
   22.523      6.50   1601.70       .00   1600.94   1602.05       .35      3.70       .16   1599.80
   1694.0    1362.2     331.8        .0     286.7      68.0        .0     124.1      61.4 100000.00
      .84      4.75      4.88       .00      .049      .042      .000      .000   1595.20   9952.00
  .005096      425.      425.      425.         3         0         0       .00    129.30  10081.30


*SECNO 22.617

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=    10400.0   10470.0  TYPE=      1  TARGET=       70.000
       STA. 10435= BASELINE 4B
   22.617      4.16   1608.36   1608.36   1608.15   1609.23       .87      3.47       .15   1607.10
    816.0      69.7     626.3     119.9      18.8      76.2      26.7     126.9      62.6   1606.20
      .86      3.70      8.22      4.49      .049      .042      .049      .000   1604.20  10400.00
  .015944      515.      495.      465.        20        14         0       .00     70.00  10470.00


*SECNO 22.657
3280 CROSS SECTION     22.66 EXTENDED       .56 FEET


3470 ENCROACHMENT STATIONS=    10800.0   10855.0  TYPE=      1  TARGET=       55.000
       STA. 10800= BASELINE 4B
       ET APPLIED TO LIMIT EFFECTIVE FLOW WITHIN 4:1 FLARE ANGLE OF CULVERT
       OUTLET.
       FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW LIMITS
1
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       POSSIBLE.
   22.657      2.96   1611.06       .00   1610.41   1611.59       .53      2.33       .03   1608.20
    816.0     156.5     491.4     168.1      34.4      75.9      35.7     127.5      62.9   1608.30
      .87      4.55      6.48      4.71      .049      .042      .049      .000   1608.10  10800.00
  .008164      220.      210.      200.         2         0         0       .00     55.00  10855.00


CCHV=     .300 CEHV=     .500
*SECNO 22.669

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1614.40 ELREA=      1614.40
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      BEGIN SUN VALLEY PARKWAY CULVERT (6- 10' X 4' RCB - STRUC. NO. 18)
   22.669      1.74   1611.64       .00   1611.41   1612.21       .58       .60       .03   1614.40
   816.0        .0     816.0        .0       .0     134.0        .0     127.7      63.0   1614.40
     .87       .00      6.09       .00      .000      .035      .000      .000   1609.90   9961.50
  .010434      65.       65.       65.         3         0         0       .00     77.00  10038.50



SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    6         .012      .20       2.70      .00       6.00      12.00     148.00    12        3         1610.50   1609.90

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 22.697

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1612.997  EGOC =   1613.028  PCWSE=   1611.636  ELTRD=   1615.000


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.13

SPECIAL CULVERT

     EGIC      EGOC       H4      QWEIR     QCULV      VCH      ACULV     ELTRD    WEIRLN
   1613.00   1613.03      .82       0.      816.     4.921     432.0   1615.00       0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1617.00 ELREA=      1617.00

        END CULVERT (STRUC. #18)
        FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW
        LIMITS IS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF RD.
   22.697      2.15   1612.65       .00   1612.67   1613.03       .38       .82       .00   1615.00
   816.0        .0     816.0        .0       .0     165.8        .0     128.2      63.2   1615.00
     .88       .00      4.92       .00      .000      .012      .000      .000   1610.50   9961.50
  .000611     148.      148.      148.         3         0         0       .00     77.00  10038.50


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


CCHV=     .100 CEHV=     .300
*SECNO -2.322
START TRIB COMP
    -2.322     2.322  1589.631

3470 ENCROACHMENT STATIONS=     9980.0   10080.0  TYPE=      1  TARGET=      100.000
        BEGIN TRIBUTARY 4C  REPEAT CROSS-SECTION 2.322
   -2.322      5.23   1589.63       .00   1588.81   1590.09       .46       .00       .00   1586.50
   1825.0     124.9     636.0    1064.1      32.6     101.0     211.0     131.0      64.2   1586.30
     .90      3.83      6.30      5.04      .049      .042      .049      .000   1584.40   9980.00
  .005132     450.      470.      470.         0         0         0       .00    100.00  10080.00


*SECNO 32.418
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3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10357.1   10380.0  TYPE=      1  TARGET=       22.900
       ADD 30 TO TRIB 4C CROSS SECTION I.D. NUMBERS.  STA 10375 = BASELINE 4C
    32.418      2.46   1592.56   1592.56   1593.45   1593.17       .61      2.95       .04   1592.70
     134.0       .0     134.0       .0        .0      21.4        .1     133.1      64.9   1592.30
       .93       .00      6.27       .05      .000      .042      .049      .000   1590.10  10358.17
   .025797      550.      555.      480.        20        14         0       .00     18.35  10376.51


*SECNO 32.492

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


3470 ENCROACHMENT STATIONS=    10495.4   10525.0  TYPE=      1  TARGET=       29.600
       STA. 10525= BASELINE 4C
    32.492      3.39   1598.59       .00   1598.30   1598.83       .24      5.62       .04   1598.80
     134.0       .0     124.5       9.5        .0      30.6       4.9     133.4      65.1   1597.90
       .96       .00      4.07      1.94      .000      .042      .049      .000   1595.20  10496.11
   .008347      400.      415.      400.         7         0         0       .00     28.89  10525.00


*SECNO 32.558
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
1
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         QLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3470 ENCROACHMENT STATIONS=    10838.2   10867.2  TYPE=      1  TARGET=       29.000
       STA. 10840= BASELINE 4C
    32.558      1.52   1603.32   1603.32   1603.50   1603.77       .45      4.83       .06   1602.60
     134.0       .0     134.0       .0        .0      25.0        .0     133.6      65.3 100000.00
       .97       .00      5.37       .00      .000      .042      .000      .000   1601.80  10838.20
   .029375      340.      340.      335.         4        18         0       .00     29.00  10867.20


*SECNO 32.575

3470 ENCROACHMENT STATIONS=    11180.0   11210.0  TYPE=      1  TARGET=       30.000
       STA. 11195= BASELINE 4C
       ET APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1 FLARE ANGLE OF CULVERT.
       FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING POSSIBLE BEYOND EFF. FLOW
       LIMITS.
    32.575      1.28   1605.58       .00   1605.36   1605.92       .35      2.14       .01   1604.70
     134.0      23.3      94.4      16.3       7.4      18.2       4.4     133.7      65.4   1604.40
       .98      3.15      5.19      3.71      .049      .042      .049      .000   1604.30  11180.00
   .017828      100.       95.       90.         4         0         0       .00     30.00  11210.00


CCHV=     .300 CEHV=     .500
*SECNO 32.584
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1611.00 ELREA=      1611.00
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        BEGIN SUN VALLEY PARKWAY CULVERT (5- 12' X 4' RCB  - STRUC. NO. 19)
    32.584      .51   1606.81   1606.81   1606.81   1607.07      .26      1.01      .03   1610.80
     134.0       .0     134.0       .0        .0      32.8       .0     133.7     65.5   1610.80
       .98      .00      4.09      .00      .000      .035     .000      .000   1606.30   9968.00
   .023085      50.       50.       50.         2        1B        0       .00     64.00  10032.00



SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    5         .012      .20       2.70      .00       4.00      12.00     135.00    12        1         1607.00   1606.30

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 32.610
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST



SPECIAL CULVERT OUTLET CONTROL
EGIC =   1607.849  EGOC =   1607.859  PCWSE=   1606.812  ELTRD=   1610.900


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  5.35

SPECIAL CULVERT

     EGIC      EGOC       H4      QWEIR     QCULV      VCH      ACULV     ELTRD    WEIRLN
   1607.85   1607.86      .79       0.       134.     2.833     240.0   1610.90       0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1613.30 ELREA=      1613.30

        END CULVERT (STRUC. #19)
        FLOODPLAIN \FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFFECTIVE
        FLOW LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF RD.
    32.610      .73   1607.73      .00   1607.73   1607.86      .12      .79      .00   1611.50
     134.0       .0     134.0       .0        .0      47.3       .0     133.9     65.7   1611.50
      1.00      .00      2.83      .00      .000      .012     .000      .000   1607.00   9968.00
   .000808      135.      135.      135.         2         0         0       .00     64.00  10032.00


CCHV=     .100 CEHV=     .300
*SECNO -1.939
START TRIB COMP
    -1.939     1.939  1568.582

3470 ENCROACHMENT STATIONS=     9899.1   10003.9  TYPE=      1  TARGET=      104.801
        BEGIN TRIBUTARY 4D.  REPEAT CROSS-SECTION 1.939
    -1.939      5.18   1568.58      .00   1567.65   1569.44      .86      .00      .00   1565.90
    1866.0     698.4    1167.6       .0     150.8     134.5       .0     136.5     67.0 100000.00
      1.02      4.63      8.68      .00      .049      .042     .000      .000   1563.40   9899.10
   .009397      680.      680.      670.         0         0         0       .00    104.80  10003.90
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*SECNO 42.070
3280 CROSS SECTION     42.07 EXTENDED       .10 FEET

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



3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .19


3470 ENCROACHMENT STATIONS=    10408.3   10445.2  TYPE=      1  TARGET=       36.900
        ADD 40 TO TRIB. 4D CROSS-SECTION I.D. NUMBERS.  STA. 10450= BESELINE 4D
    42.070      4.29   1574.39       .00   1573.85   1574.41       .01      4.88       .08   1572.30
      62.0        .0      62.0        .0        .0      70.6        .0     139.3      68.1 100000.00
      1.24       .00       .88       .00      .000      .042      .000      .000   1570.10  10408.30
   .000286      690.      690.      700.         2         0         0       .00     36.90  10445.20


*SECNO 42.130
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10668.0   10691.8  TYPE=      1  TARGET=       23.800
        STA. 10670= BASELINE 4D.
    42.130      2.21   1576.61   1576.61   1576.67   1576.96       .35       .31       .10   1576.90
      62.0        .0      62.0        .0        .0      13.0        .0     139.6      68.3 100000.00
      1.26       .00      4.75       .00      .000      .042      .000      .000   1574.40  10670.90
   .033306      340.      320.      275.        20        11         0       .00     20.50  10691.40


*SECNO 42.200

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.29


3470 ENCROACHMENT STATIONS=    10819.0   10843.0  TYPE=      1  TARGET=       24.000
        STA. 10815= BASELINE 4D.
    42.200      1.93   1581.43       .00   1580.94   1581.54       .11      4.55       .02   1581.30
      62.0        .0      62.0        .0        .0      23.0        .0     139.7      68.5 100000.00
      1.30       .00      2.70       .00      .000      .042      .000      .000   1579.50  10819.00
   .006350      370.      370.      370.         7         0         0       .00     24.00  10843.00


*SECNO 42.299
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST
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3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

3470 ENCROACHMENT STATIONS= 11027.8 11051.5 TYPE= 1 TARGET= 23.700
STA. 11030= BASELINE 4D.

42.299	2.12	1586.52	.00	1586.41	1586.81	.29	5.22	.05	1587.70
62.0	.0	62.0	.0	.0	14.4	.0	140.0	68.7	100000.00
1.33	.00	4.30	.00	.000	.042	.000	.000	1584.40	11033.96
.017723	515.	525.	525.	5	0	0	.00	16.17	11050.13

*SECNO 42.401

3470 ENCROACHMENT STATIONS= 11694.6 11702.5 TYPE= 1 TARGET= 7.900
STA. 11725= BASELINE 4D.
ET APPLIED TO LIMIT EFF. FLOW TO WITHIN 4:1 FLARE ANGLE OF CULVERT OUTL.
FLOODPLAIN PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW LIMITS
IS POSSIBLE.

42.401	2.70	1597.90	.00	1597.60	1598.44	.53	11.55	.07	1596.60
62.0	.0	62.0	.0	.0	10.6	.0	140.1	68.9	100000.00
1.36	.00	5.86	.00	.000	.042	.000	.000	1595.20	11694.60
.026337	540.	540.	530.	4	0	0	.00	7.90	11702.50

CCHV= .300 CEHV= .500
*SECNO 42.406
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1602.40 ELREA= 1602.40

BEGIN SUN VALLEY PARKWAY CULVERT (2- 42" X 29" C.S.P.A. - STRUC. NO. 22)

42.406	1.34	1600.74	1600.74	1600.74	1601.42	.68	.65	.07	1602.40
62.0	.0	62.0	.0	.0	9.4	.0	140.1	68.9	1602.40
1.36	.00	6.62	.00	.000	.035	.000	.000	1599.40	9996.50
.025352	25.	25.	25.	20	8	0	.00	7.00	10003.50

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

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 1600.32 , NOT 1600.74 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	5.29	2.63	.00	7.00	1.70	12.80	.00	1600.00	1599.40

*SECNO 42.432

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.51

PRESSURE FLOW

ESPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN

```
  1602.67   1602.63       .00        0.       62.       13.       13.     1602.40   1602.90        0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1604.00 ELREA=      1604.00

       END CULVERT (STRUC. #22)
       FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL UPSTREAM OF ROAD AS PONDING
       OUTSIDE OF EFF. FLOW LIMITS IS POSSIBLE AND DETENTION REQUIRES
       PRESERVATION.
   42.432      2.47   1602.47       .00   1602.47   1602.67       .20      1.25       .00   1603.00
     62.0        .0      62.0        .0       .0      17.3        .0     140.2      68.9   1603.00
     1.37       .00      3.59       .00      .000      .024      .000      .000   1600.00   9996.50
  .002053      135.      135.      135.         2         0         0       .00      7.00  10003.50


#SECNO 42.436

3470 ENCROACHMENT STATIONS=     9971.2   10027.8  TYPE=      1  TARGET=       56.600
   42.436      2.19   1602.69       .00   1602.70   1602.74       .05       .03       .05   1602.00
     62.0       4.5      52.8       4.7       6.5      28.2       6.9     140.2      68.9   1602.00
     1.37       .69      1.87       .69      .035      .035      .035      .000   1600.50   9971.26
  .001084       20.       20.       20.         2         0         0       .00     56.52  10027.78


CCHV=     .100 CEHV=     .300
#SECNO -1.678
1
  06MAY93      11:42:09                                                                                    PAGE   70


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


START TRIB COMP
     -1.678     1.678  1554.195

3470 ENCROACHMENT STATIONS=     9980.0   10100.0  TYPE=      1  TARGET=      120.000
       BEGIN TRIBUTARY 4E.  REPEAT CROSS-SECTION 1.678.
   -1.678      4.79   1554.19       .00   1553.18   1554.78       .58       .00       .00   1551.90
   1939.0      19.7    1087.6     831.7       6.4     155.7     172.9     143.3      70.4   1551.10
     1.40      3.09      6.99      4.81      .049      .042      .049      .000   1549.40   9980.00
  .007605      710.      730.      700.         0         0         0       .00    120.00  10100.00


#SECNO 51.836
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10565.0   10601.1  TYPE=      1  TARGET=       36.100
       ADD 50 TO TRIB. 4E CROSS-SECTION I.D. NUMBERS. STA.10560=BASELINE 4E
   51.836      4.00   1561.10   1561.10   1561.32   1561.42       .32      6.34       .03   1560.70
     82.0       5.5      76.5        .0       4.0      16.4        .0     146.5      71.8 100000.00
     1.45      1.37      4.66       .00      .049      .042      .000      .000   1557.10  10565.19
  .017230      800.      820.      780.        20        10         0       .00     35.91  10601.10


#SECNO 51.980
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF

3470 ENCROACHMENT STATIONS=    11100.0   11226.2  TYPE=      1  TARGET=      126.200
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      STA. 11280=BASELINE 4E.
   51.980      6.50   1569.90   1569.63   1569.50   1569.92       .02      4.26     11.34   1569.30
     82.0      41.1      40.9       .0      35.2      33.8        .0     147.3      73.1 100000.00
     1.62      1.17      1.21       .00      .049      .042      .000      .000   1563.40  11100.00
  .002974      700.      725.      710.        20        12         0       .00    126.20  11226.20


*SECNO 52.080
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    11841.4   11868.3  TYPE=      1  TARGET=       26.899
      STA. 11820=BASELINE 4E.
1
   06MAY93      11:42:09                                                                                    PAGE   71


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


   52.080      1.28   1577.18   1577.18   1577.08   1577.52       .34      4.13       .10   1575.90
     82.0        .0      82.0       .0        .0      17.5        .0     147.8      74.2 100000.00
     1.66       .00      4.68       .00      .000      .042      .000      .000   1575.90  11841.40
  .034755      580.      580.      550.        20        25         0       .00     26.90  11868.30


*SECNO 52.175

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.23


3470 ENCROACHMENT STATIONS=    11957.8   11981.5  TYPE=      1  TARGET=       23.700
      STA. 11980=BASELINE 4E.
   52.175      1.73   1584.33       .00   1583.44   1584.47       .14      6.94       .02   1583.10
     82.0        .0      82.0       .0        .0      27.3        .0     148.1      74.5 100000.00
     1.71       .00      3.00       .00      .000      .042      .000      .000   1582.60  11957.80
  .006999      520.      520.      500.         8         0         0       .00     23.70  11981.50


*SECNO 52.248

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


3470 ENCROACHMENT STATIONS=    10000.0   10035.0  TYPE=      1  TARGET=       35.000
      STA. 10000=BASELINE 4E.
   52.248       .83   1588.83       .00   1589.03   1589.11       .28      4.59       .04   1589.00
     82.0        .0      82.0       .0        .0      19.3        .0     148.3      74.7 100000.00
     1.73       .00      4.24       .00      .000      .042      .000      .000   1588.00  10001.70
  .027791      375.      370.      370.         5         0         0       .00     31.59  10033.29


CCHV=     .300 CEHV=     .500
*SECNO 52.259
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1593.70 ELREA=      1593.70

      BEGIN SUN VALLEY PARKWAY CULVERT (3- 42" X 29" C.S.P.A.  -STRUC. NO. 24)
   52.259      1.40   1591.90   1591.90   1591.90   1592.50       .60      1.48       .16   1593.70
     82.0        .0      82.0       .0        .0      13.2        .0     148.3      74.7   1593.70
```

```
      1.73       .00      6.23       .00      .000      .035      .000      .000   1590.50   9994.50
   .022099       60.       60.       60.         5        14         0       .00     11.00  10005.50


1
   06MAY93      11:42:09                                                                          PAGE   72


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



SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1591.70 , NOT    1591.90 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     1.25      5.29      2.63       .00     11.00      3.00     19.20       .00   1591.30   1590.90

*SECNO 52.285

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.30

CLASS B LOW FLOW

3420 BRIDGE W.S.=    1592.58 BRIDGE VELOCITY=       6.92     CALCULATED CHANNEL AREA=        10.

 EGPRS      EGLWC       H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC      ELTRD     WEIRLN
                                                                  AREA
       .00   1593.69      .00        0.       82.       19.       19.     1593.70   1594.00        0.


        END CULVERT (STRUC. #24)
        FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING OUTSIDE EFF. FLOW
        LIMITS POSSIBLE AND DETENTION REQUIRES PRESERVATION UPSTREAM OF ROAD.
   52.285      2.65   1593.55       .00   1593.55   1593.69       .14      1.19       .00   1594.10
     82.0        .0      82.0        .0        .0      26.9        .0     148.4      74.8   1594.10
     1.74       .00      3.04       .00      .000      .024      .000      .000   1590.90   9994.50
  .001196      137.      137.      137.         0         0         0       .00     11.00  10005.50


*SECNO 52.289

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .34


3470 ENCROACHMENT STATIONS=     9992.0   10011.0  TYPE=      1  TARGET=       19.000
   52.289      1.52   1593.52       .00   1593.52   1593.83       .30       .05       .08 100000.00
     82.0        .0      80.7       1.3        .0      18.1        .7     148.4      74.8   1593.00
     1.75       .00      4.46      1.95      .000      .035      .035      .000   1592.00   9992.10
  .010250       20.       20.       20.         2         0         0       .00     18.90  10011.00


CCHV=     .100 CEHV=     .300
*SECNO -1.413
1
   06MAY93      11:42:09                                                                          PAGE   73


    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST
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```
START TRIB COMP
    -1.413     1.413  1537.842

3470 ENCROACHMENT STATIONS=     9956.0   10065.0  TYPE=      1  TARGET=      109.000
       BEGIN TRIBUTARY 4F.  REPEAT CROSS-SECTION 1.413.
   -1.413      5.74   1537.84       .00   1536.80   1538.44       .60       .00       .00   1534.20
   2240.0     192.4    1450.1     597.5      46.2     209.8     123.8     151.7      75.8   1534.70
     1.78      4.17      6.91      4.83      .049      .042      .049      .000   1532.10   9956.00
  .005858      700.      720.      720.         0         0         0       .00    109.00  10065.00


*SECNO 61.538
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10292.1   10331.1  TYPE=      1  TARGET=       39.000
       STA.  10345=BASELINE 4F.
   61.538      2.93   1542.83   1542.83   1542.76   1543.54       .70      4.58       .03   1542.80
    350.0        .0     350.0        .0        .0      52.0        .0     155.0      76.9 100000.00
     1.81       .00      6.74       .00      .000      .042      .000      .000   1539.90  10292.10
  .025387      670.      680.      650.        20        11         0       .00     39.00  10331.10


*SECNO 61.690

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.93


3470 ENCROACHMENT STATIONS=    10953.5   11016.7  TYPE=      1  TARGET=       63.200
       STA.  11000=BASELINE 4F.
   61.690      3.05   1553.45       .00   1552.97   1553.66       .21     10.07       .05   1552.10
    350.0        .0     350.0        .0        .0      94.6        .0     156.4      77.9 100000.00
     1.87       .00      3.70       .00      .000      .042      .000      .000   1550.40  10953.50
  .006832      850.      850.      800.         8         0         0       .00     63.20  11016.70


*SECNO 61.811

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
1
   06MAY93      11:42:09                                                                          PAGE   74


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


3470 ENCROACHMENT STATIONS=    11610.0   11640.0  TYPE=      1  TARGET=       30.000
       STA.  11590=BASELINE 4F.
   61.811      3.31   1561.61   1561.61   1561.14   1562.52       .91      7.46       .21   1561.20
    350.0       7.8     229.2     113.0       3.5      27.4      18.1     157.6      78.7   1559.30
     1.90      2.20      8.37      6.26      .049      .042      .049      .000   1558.30  11610.00
  .020415      680.      680.      680.         3         8         0       .00     30.00  11640.00


*SECNO 61.936
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3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.60


3470 ENCROACHMENT STATIONS=    12007.0   12033.0  TYPE=      1  TARGET=       26.000
       STA.  12030=BASELINE 4F.
    61.936      3.26   1570.46       .00   1569.85   1570.97       .51      8.42       .04   1568.60
     350.0       3.7     345.1       1.2       1.8      59.8        .8     158.4      79.1   1569.80
      1.93      2.04      5.77      1.54      .049      .042      .049      .000   1567.20  12007.00
   .008016      660.      700.      670.         6         0         0       .00     26.00  12033.00


*SECNO 62.027

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


3470 ENCROACHMENT STATIONS=    12453.2   12473.3  TYPE=      1  TARGET=       20.100
       STA.  12460=BASELINE 4F.
    62.027      2.99   1576.19       .00   1575.26   1577.18       .99      6.06       .14   1574.40
     350.0        .0     350.0        .0        .0      43.9        .0     159.0      79.4 100000.00
      1.95       .00      7.97       .00      .000      .042      .000      .000   1573.20  12453.20
   .021561      490.      490.      480.         4         0         0       .00     20.10  12473.30


*SECNO 62.074

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9975.0   10019.0  TYPE=      1  TARGET=       44.000
    62.074      2.67   1580.87       .00   1580.56   1581.30       .43      4.06       .06   1581.00
     350.0        .0     350.0        .0        .0      66.6        .0     159.4      79.6 100000.00
      1.96       .00      5.26       .00      .000      .042      .000      .000   1578.20   9976.42
   .012685      250.      250.      250.         3         0         0       .00     42.58  10019.00


1
   06MAY93      11:42:09                                                                              PAGE   75


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


CCHV=     .300 CEHV=     .500
*SECNO 62.087

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


3493 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1583.40 ELREA=      1583.40

       BEGIN SUN VALLEY PARKWAY CULVERT (3-8' X 3' RCB  -STRUC. NO. 25)
    62.087      1.87   1581.57       .00   1581.40   1581.93       .36       .61       .02   1583.20
     350.0        .0     350.0        .0        .0      72.7        .0     159.5      79.6   1583.20
      1.96       .00      4.82       .00      .000      .035      .000      .000   1579.70   9974.00
   .006336       70.       70.       70.         2         0         0       .00     39.00  10013.00


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     3         .012      .20      2.63       .00      3.00      8.00     141.00     12        1       1580.40   1579.40
```

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 62.114

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1583.368 EGOC = 1583.391 PCWSE= 1581.566 ELTRD= 1584.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.70

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1583.37	1583.39	1.47	0.	350.	3.164	72.0	1584.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1585.60 ELREA= 1585.60

END CULVERT (STRUC. NO. 25)

62.114	2.84	1583.24	.00	1583.24	1583.39	.16	1.47	.00	1583.90
350.0	.0	350.0	.0	.0	110.6	.0	159.8	79.7	1583.90
1.98	.00	3.16	.00	.000	.012	.000	.000	1580.40	9974.00
.000195	141.	141.	141.	2	0	0	.00	39.00	10013.00

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

*SECNO 62.127

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS= 9981.0 10025.0 TYPE= 1 TARGET= 44.000
ET APPLIED TO LIMIT EFF. FLOW TO WITHIN WEIR LEVEES, LEFT AND RIGHT, AS
WELL AS 1:1 FLARE ANGLE FROM CULVERT INLET.
FLOODPLAIN\FLOODWAY PLOTTED BASED ON WSEL AS PONDING BEYOND EFF. FLOW
LIMITS IS POSSIBLE AND DETENTION UPSTREAM OF ROAD REQUIRES PRESERVATION.

62.127	3.16	1584.36	1584.36	1584.36	1585.09	.73	.04	.29	1584.00
350.0	.0	347.4	2.6	.0	50.6	1.6	159.9	79.8	1584.00
1.98	.00	6.87	1.64	.000	.035	.035	.000	1581.20	9981.00
.014622	70.	70.	70.	20	8	0	.00	40.70	10021.70

THIS RUN EXECUTED 06MAY93 11:46:29

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH NO.4 100-YEAR PROF

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	.159	2275.00	1476.50	.00	3.33	.00	9900.50	9937.30	.00	.00	9368.31	10583.85
	.159	2275.00	1477.50	.00	5.12	.00	9900.50	9937.30	9810.00	10163.00	9810.00	10163.00
	.273	2275.00	1481.18	.00	3.42	630.00	10000.00	10047.00	.00	.00	8336.98	10333.65
	.273	2275.00	1481.87	.00	4.25	630.00	10000.00	10047.00	9700.00	10230.00	9700.00	10230.00
*	.417	2275.00	1487.42	1487.40	7.66	750.00	9981.00	10011.10	.00	.00	8686.90	10531.87
*	.417	2275.00	1488.43	1488.43	8.76	750.00	9981.00	10011.10	9950.00	10230.00	9950.00	10230.00
	.564	2275.00	1493.41	1493.36	7.22	585.00	10086.00	10133.70	.00	.00	8843.70	10372.29
	.564	2275.00	1494.20	1494.01	8.67	585.00	10086.00	10133.70	9900.00	10140.00	9964.61	10140.00
	.689	2275.00	1500.21	.00	5.24	710.00	10118.30	10195.20	9281.80	10571.30	9321.84	10557.36
	.689	2275.00	1501.07	.00	6.13	710.00	10118.30	10195.20	9906.00	10195.20	9906.00	10195.20
	.795	2275.00	1506.10	.00	4.23	650.00	9961.70	10024.00	9085.40	10671.20	9116.21	10638.39
	.795	2275.00	1506.94	.00	6.26	650.00	9961.70	10024.00	9924.20	10223.00	9924.20	10223.00
	.917	2275.00	1512.20	.00	3.51	730.00	9908.20	10000.00	9518.40	10714.20	9607.97	10693.61
	.917	2275.00	1513.24	.00	3.26	730.00	9908.20	10000.00	9908.20	10325.00	9908.20	10325.00
	1.038	2275.00	1518.98	.00	3.57	705.00	9962.50	10000.10	9631.40	10587.30	9653.14	10584.43
	1.038	2275.00	1519.97	.00	6.14	705.00	9962.50	10000.10	9962.50	10239.80	9962.50	10239.80
	1.167	2275.00	1524.82	.00	6.85	645.00	9992.40	10026.10	9245.10	10244.90	9635.63	10166.03
	1.167	2275.00	1525.80	.00	7.40	645.00	9992.40	10026.10	9984.40	10163.60	9984.40	10163.60
	1.292	2275.00	1530.69	.00	7.22	670.00	10036.90	10084.90	9417.50	10350.00	9722.42	10122.36
	1.292	2275.00	1531.46	.00	9.25	670.00	10036.90	10084.90	9989.00	10084.90	9989.00	10084.90
	1.413	2240.00	1536.80	.00	6.70	720.00	9973.00	10023.70	9335.00	10350.00	9743.45	10202.19
*	1.413	2240.00	1537.84	.00	6.90	720.00	9973.00	10023.70	9956.00	10065.00	9956.00	10065.00

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	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	1.553	1939.00	1545.55	1545.55	8.10	730.00	9966.10	9993.30	9494.90	10096.90	9597.11	10094.50
*	1.553	1939.00	1546.05	1546.05	10.32	730.00	9966.10	9993.30	9966.10	10068.00	9966.10	10068.00
	1.678	1939.00	1553.18	.00	6.38	730.00	9982.80	10028.00	9741.00	10364.50	9758.42	10181.38
*	1.678	1939.00	1554.19	.00	6.98	730.00	9982.80	10028.00	9980.00	10100.00	9980.00	10100.00
	1.818	1866.00	1560.44	.00	5.38	725.00	9989.40	10021.60	9538.50	10223.00	9583.48	10175.51
	1.818	1866.00	1561.17	.00	7.85	725.00	9989.40	10021.60	9949.80	10063.30	9949.80	10063.30
*	1.939	1866.00	1567.65	1567.65	8.13	680.00	9974.00	10003.90	9534.30	10097.60	9732.54	10036.07
	1.939	1866.00	1568.58	.00	8.68	680.00	9974.00	10003.90	9899.10	10003.90	9899.10	10003.90

	2.057	1825.00	1573.38	.00	5.59	670.00	9963.20	10000.00	9689.10	10356.50	9953.12	10333.28
	2.057	1825.00	1574.22	.00	6.42	670.00	9963.20	10000.00	9963.20	10097.80	9963.20	10097.80
*	2.148	1825.00	1578.57	1578.57	7.57	550.00	9871.00	9909.10	9768.20	10472.00	9860.16	10396.75
*	2.148	1825.00	1578.97	1578.97	9.99	550.00	9871.00	9909.10	9871.00	9950.00	9871.00	9950.00
	2.204	1825.00	1581.14	.00	6.58	200.00	9910.80	9958.60	9844.40	10350.00	9846.20	10342.33
	2.204	1825.00	1582.12	.00	6.64	200.00	9910.80	9958.60	9900.00	10040.00	9900.00	10040.00
	2.242	1825.00	1584.59	.00	7.02	350.00	10025.50	10066.50	9898.30	10260.30	9925.66	10258.58
	2.242	1825.00	1585.13	.00	9.27	350.00	10025.50	10066.50	10025.50	10089.10	10025.50	10089.10
	2.322	1825.00	1588.81	.00	7.33	470.00	9993.60	10018.50	9819.50	10343.20	9858.89	10136.85
*	2.322	1825.00	1589.63	.00	6.29	470.00	9993.60	10018.50	9980.00	10080.00	9980.00	10080.00
*	2.439	1694.00	1595.62	1595.62	9.53	620.00	9993.00	10017.50	9925.70	10119.50	9946.39	10083.80
*	2.439	1694.00	1596.23	1596.23	11.87	620.00	9993.00	10017.50	9993.00	10032.50	9993.00	10032.50
*	2.523	1694.00	1600.85	1600.85	8.83	425.00	9958.60	9992.80	9897.20	10218.90	9938.30	10098.17
*	2.523	1694.00	1601.57	.00	6.72	425.00	9958.60	9992.80	9952.00	10081.30	9952.00	10081.30
*	2.621	896.00	1607.38	.00	6.98	550.00	10012.90	10029.50	9892.10	10154.80	9893.66	10105.62
*	2.621	896.00	1607.85	1607.85	10.03	550.00	10012.90	10029.50	10012.00	10056.00	10012.00	10056.00
*	2.750	151.00	1614.16	.00	4.58	710.00	9986.80	9995.20	9973.00	10009.00	9973.00	10009.00
*	2.750	151.00	1615.12	.00	2.51	710.00	9986.80	9995.20	9973.00	10009.00	9973.00	10009.00
*	2.759	151.00	1616.91	1616.91	7.89	50.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	2.759	151.00	1616.92	1616.92	7.88	50.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	2.784	151.00	1617.91	.00	6.00	133.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	2.784	151.00	1617.91	.00	6.00	133.00	9995.00	10005.00	.00	.00	9995.00	10005.00
*	2.798	151.00	1618.36	.00	4.91	75.00	9980.00	10014.00	9980.00	10014.00	9985.75	10013.63
*	2.798	151.00	1618.36	.00	4.91	75.00	9980.00	10014.00	9980.00	10014.00	9985.75	10013.63
	-2.621	896.00	1607.38	.00	6.96	550.00	10012.90	10029.50	9892.10	10154.80	9892.37	10105.67
	-2.621	896.00	1607.85	.00	9.79	550.00	10012.90	10029.50	10012.90	10055.20	10012.90	10055.20

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	SECND	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	12.725	766.00	1613.38	.00	7.03	550.00	10295.20	10305.10	10250.40	10349.90	10250.40	10349.90
*	12.725	766.00	1613.92	.00	5.07	550.00	10295.20	10305.10	10250.40	10349.90	10250.40	10349.90
	12.734	766.00	1613.87	.00	6.35	45.00	9961.50	10038.50	.00	.00	9961.50	10038.50
	12.734	766.00	1614.08	.00	5.56	45.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	12.760	766.00	1614.87	.00	4.80	137.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	12.760	766.00	1614.86	.00	4.82	137.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	12.775	766.00	1617.00	1617.00	6.32	80.00	9948.00	10051.00	.00	.00	9948.02	10046.99
*	12.775	766.00	1617.00	1617.00	6.32	80.00	9948.00	10051.00	9948.00	10047.00	9948.02	10046.99
	-2.439	1694.00	1595.62	1595.62	9.53	620.00	9993.00	10017.50	9925.70	10119.50	9946.39	10083.80
	-2.439	1694.00	1596.23	1596.23	11.87	620.00	9993.00	10017.50	9993.00	10032.50	9993.00	10032.50
	22.523	1694.00	1600.94	.00	6.24	425.00	10058.10	10081.30	9897.20	10218.90	9919.45	10099.45
*	22.523	1694.00	1601.70	.00	4.88	425.00	10058.10	10081.30	9952.00	10081.30	9952.00	10081.30
*	22.617	816.00	1608.15	1608.15	6.29	495.00	10419.70	10449.50	10182.20	10491.60	10219.04	10485.75
*	22.617	816.00	1608.36	1608.36	8.22	495.00	10419.70	10449.50	10400.00	10470.00	10400.00	10470.00

	22.657	816.00	1610.41	.00	6.41	210.00	10814.30	10840.60	10778.80	10876.30	10778.80	10876.30
	22.657	816.00	1611.06	.00	6.48	210.00	10814.30	10840.60	10800.00	10855.00	10800.00	10855.00
*	22.669	816.00	1611.41	1611.41	7.01	65.00	9961.50	10038.50	.00	.00	9961.50	10038.50
	22.669	816.00	1611.64	.00	6.09	65.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	22.697	816.00	1612.67	.00	4.89	148.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	22.697	816.00	1612.65	.00	4.92	148.00	9961.50	10038.50	.00	.00	9961.50	10038.50
	-2.322	1825.00	1588.81	.00	7.32	470.00	9993.60	10018.50	9819.50	10343.20	9858.86	10136.91
	-2.322	1825.00	1589.63	.00	6.30	470.00	9993.60	10018.50	9980.00	10080.00	9980.00	10080.00
*	32.418	134.00	1593.45	.00	2.35	555.00	10357.10	10375.80	10119.50	10463.50	10345.51	10434.93
*	32.418	134.00	1592.56	1592.56	6.27	555.00	10357.10	10375.80	10357.10	10380.00	10358.17	10376.51
*	32.492	134.00	1598.30	1598.30	5.10	415.00	10495.40	10517.20	10250.60	10571.50	10497.06	10545.60
*	32.492	134.00	1598.59	.00	4.07	415.00	10495.40	10517.20	10495.40	10525.00	10496.11	10525.00
	32.558	134.00	1603.50	.00	4.23	340.00	10838.20	10867.20	10686.20	10921.10	10831.22	10868.80
*	32.558	134.00	1603.32	1603.32	5.37	340.00	10838.20	10867.20	10838.20	10867.20	10838.20	10867.20
*	32.575	134.00	1605.36	1605.36	5.13	95.00	11190.20	11206.00	11154.00	11241.20	11168.84	11225.55
	32.575	134.00	1605.58	.00	5.19	95.00	11190.20	11206.00	11180.00	11210.00	11180.00	11210.00
*	32.584	134.00	1606.81	1606.81	4.07	50.00	9968.00	10032.00	.00	.00	9968.00	10032.00
*	32.584	134.00	1606.81	1606.81	4.09	50.00	9968.00	10032.00	.00	.00	9968.00	10032.00
*	32.610	134.00	1607.73	.00	2.83	135.00	9968.00	10032.00	.00	.00	9968.00	10032.00
*	32.610	134.00	1607.73	.00	2.83	135.00	9968.00	10032.00	.00	.00	9968.00	10032.00

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	-1.939	1866.00	1567.65	.00	8.10	680.00	9974.00	10003.90	9534.30	10552.70	9732.54	10424.52
	-1.939	1866.00	1568.58	.00	8.68	680.00	9974.00	10003.90	9899.10	10003.90	9899.10	10003.90
*	42.070	62.00	1573.85	.00	.90	690.00	10408.30	10445.20	10356.50	10782.90	10399.88	10527.37
*	42.070	62.00	1574.39	.00	.88	690.00	10408.30	10445.20	10408.30	10445.20	10408.30	10445.20
*	42.130	62.00	1576.67	1576.67	4.29	320.00	10668.00	10691.80	10472.00	10882.30	10647.48	10797.67
*	42.130	62.00	1576.61	1576.61	4.75	320.00	10668.00	10691.80	10668.00	10691.80	10670.90	10691.40
*	42.200	62.00	1580.94	.00	2.05	370.00	10819.00	10843.00	10623.40	11343.00	10822.68	10917.05
*	42.200	62.00	1581.43	.00	2.70	370.00	10819.00	10843.00	10819.00	10843.00	10819.00	10843.00
*	42.299	62.00	1586.41	.00	4.87	525.00	11027.80	11051.50	10843.00	11129.20	11034.57	11049.88
*	42.299	62.00	1586.52	.00	4.30	525.00	11027.80	11051.50	11027.80	11051.50	11033.96	11050.13
	42.401	62.00	1597.60	.00	4.70	540.00	11694.60	11702.50	11688.00	11708.00	11688.00	11708.00
	42.401	62.00	1597.90	.00	5.86	540.00	11694.60	11702.50	11694.60	11702.50	11694.60	11702.50
*	42.406	62.00	1600.74	1600.74	6.60	25.00	9996.50	10003.50	.00	.00	9996.50	10003.50
*	42.406	62.00	1600.74	1600.74	6.62	25.00	9996.50	10003.50	.00	.00	9996.50	10003.50
*	42.432	62.00	1602.47	.00	3.58	135.00	9996.50	10003.50	.00	.00	9996.50	10003.50
*	42.432	62.00	1602.47	.00	3.59	135.00	9996.50	10003.50	.00	.00	9996.50	10003.50
	42.436	62.00	1602.70	.00	1.86	20.00	9990.00	10008.00	.00	.00	9971.16	10027.89
	42.436	62.00	1602.69	.00	1.87	20.00	9990.00	10008.00	9971.20	10027.80	9971.26	10027.78
	-1.678	1939.00	1553.18	.00	6.38	730.00	9982.80	10028.00	9741.00	10364.50	9758.42	10181.38
	-1.678	1939.00	1554.19	.00	6.99	730.00	9982.80	10028.00	9980.00	10100.00	9980.00	10100.00

*	51.836	82.00	1561.32	.00	2.76	820.00	10585.20	10601.10	10440.90	10857.00	10503.29	10648.76
*	51.836	82.00	1561.10	1561.10	4.66	820.00	10585.20	10601.10	10565.00	10601.10	10565.19	10601.10
*	51.980	82.00	1569.50	1569.50	1.15	725.00	11158.60	11226.20	10994.40	11506.00	11014.52	11225.21
*	51.980	82.00	1569.90	1569.63	1.21	725.00	11158.60	11226.20	11100.00	11226.20	11100.00	11226.20
*	52.080	82.00	1577.08	.00	2.19	580.00	11841.40	11868.30	11691.30	12099.70	11768.32	11909.26
*	52.080	82.00	1577.18	1577.18	4.68	580.00	11841.40	11868.30	11841.40	11868.30	11841.40	11868.30
*	52.175	82.00	1583.44	.00	2.05	520.00	11957.80	11981.50	11835.90	12195.00	11945.47	12156.86
*	52.175	82.00	1584.33	.00	3.00	520.00	11957.80	11981.50	11957.80	11981.50	11957.80	11981.50
	52.248	82.00	1589.03	.00	3.15	370.00	10000.00	10035.00	.00	.00	9998.84	10036.60
*	52.248	82.00	1588.83	.00	4.24	370.00	10000.00	10035.00	10000.00	10035.00	10001.70	10033.29
*	52.259	82.00	1591.90	1591.90	6.24	60.00	9994.50	10005.50	.00	.00	9994.50	10005.50
*	52.259	82.00	1591.90	1591.90	6.23	60.00	9994.50	10005.50	.00	.00	9994.50	10005.50
*	52.285	82.00	1593.55	.00	3.04	137.00	9994.50	10005.50	.00	.00	9994.50	10005.50
*	52.285	82.00	1593.55	.00	3.04	137.00	9994.50	10005.50	.00	.00	9994.50	10005.50

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	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	52.289	82.00	1593.52	.00	4.46	20.00	9990.00	10009.00	.00	.00	9992.11	10011.66
*	52.289	82.00	1593.52	.00	4.46	20.00	9990.00	10009.00	9992.00	10011.00	9992.10	10011.00
	-1.413	2240.00	1536.80	.00	6.70	720.00	9973.00	10023.70	9335.00	10350.00	9743.45	10202.18
	-1.413	2240.00	1537.84	.00	6.91	720.00	9973.00	10023.70	9956.00	10065.00	9956.00	10065.00
*	61.538	350.00	1542.76	1542.71	5.11	680.00	10292.10	10331.10	10096.90	10409.60	10226.83	10360.97
*	61.538	350.00	1542.83	1542.83	6.74	680.00	10292.10	10331.10	10292.10	10331.10	10292.10	10331.10
	61.690	350.00	1552.97	.00	3.49	850.00	10953.50	11016.70	10919.10	11270.70	10920.01	11136.71
*	61.690	350.00	1553.45	.00	3.70	850.00	10953.50	11016.70	10953.50	11016.70	10953.50	11016.70
	61.811	350.00	1561.14	.00	6.52	680.00	11619.40	11631.60	11568.40	11824.00	11569.42	11685.41
*	61.811	350.00	1561.61	1561.61	8.37	680.00	11619.40	11631.60	11610.00	11640.00	11610.00	11640.00
*	61.936	350.00	1569.85	1569.85	4.79	700.00	12008.00	12031.80	11746.50	12299.70	11965.46	12252.17
*	61.936	350.00	1570.46	.00	5.77	700.00	12008.00	12031.80	12007.00	12033.00	12007.00	12033.00
*	62.027	350.00	1575.26	1575.23	5.25	490.00	12453.20	12473.30	12313.40	12658.50	12347.04	12523.60
*	62.027	350.00	1576.19	.00	7.97	490.00	12453.20	12473.30	12453.20	12473.30	12453.20	12473.30
*	62.074	350.00	1580.56	1580.56	5.68	250.00	9975.00	10019.00	.00	.00	9979.42	10062.33
	62.074	350.00	1580.87	.00	5.26	250.00	9975.00	10019.00	9975.00	10019.00	9976.42	10019.00
*	62.087	350.00	1581.40	.00	5.28	70.00	9974.00	10013.00	.00	.00	9974.00	10013.00
*	62.087	350.00	1581.57	.00	4.82	70.00	9974.00	10013.00	.00	.00	9974.00	10013.00
*	62.114	350.00	1583.24	.00	3.16	141.00	9974.00	10013.00	.00	.00	9974.00	10013.00
*	62.114	350.00	1583.24	.00	3.16	141.00	9974.00	10013.00	.00	.00	9974.00	10013.00
*	62.127	350.00	1584.36	1584.36	6.86	70.00	9981.00	10013.00	9981.00	10025.00	9981.00	10021.71
*	62.127	350.00	1584.36	1584.36	6.87	70.00	9981.00	10013.00	9981.00	10025.00	9981.00	10021.70

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SUMMARY PRINTOUT

	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	.159	1003.11	133.90	1137.98	2.38	3.33	2.64	1476.60	1476.50	.00	1215.54	1474.40	1.02
	.159	673.85	394.68	1206.47	4.02	5.12	3.59	1477.60	1477.50	.00	353.00	1474.40	1.05
	.273	1578.49	215.54	480.97	2.02	3.42	2.33	1481.90	1481.18	4.68	1639.90	1479.20	1.08
	.273	842.01	407.29	1025.71	2.54	4.25	3.28	1481.90	1481.87	4.37	530.00	1479.20	1.11
*	.417	670.60	605.20	999.19	5.08	7.66	3.50	1489.00	1487.42	6.25	532.95	1483.90	1.36
*	.417	154.82	957.57	1162.61	4.07	8.76	4.21	1489.00	1488.43	6.56	280.00	1483.90	1.47
	.564	901.11	1205.93	167.96	3.17	7.22	1.88	1493.80	1493.41	5.99	606.19	1487.60	1.80
	.564	478.65	1774.72	21.64	4.01	8.67	2.87	1493.80	1494.20	5.77	175.39	1487.60	1.32
	.689	587.47	698.06	989.46	2.97	5.24	3.40	1501.30	1500.21	6.80	831.80	1494.80	1.18
	.689	1053.99	1221.01	.00	3.78	6.13	.00	1501.30	1501.07	6.87	289.20	1494.80	1.18
	.795	576.32	381.41	1317.27	2.61	4.23	2.72	1507.60	1506.10	5.89	1174.12	1503.20	1.10
	.795	121.33	894.65	1259.02	3.15	6.26	4.20	1507.60	1506.94	5.87	298.80	1503.20	1.15
	.917	5.74	61.20	2208.06	.80	3.51	3.57	1512.80	1512.20	6.10	669.78	1509.80	1.02
	.917	.00	311.26	1963.74	.00	3.26	3.95	1512.80	1513.24	6.30	416.80	1509.80	1.01
	1.038	235.61	139.84	1899.55	1.92	3.57	3.69	1520.10	1518.98	6.79	927.80	1516.10	1.11
	1.038	.00	467.21	1807.79	.00	6.14	4.70	1520.10	1519.97	6.73	277.30	1516.10	1.04
	1.167	1096.34	694.39	484.26	3.35	6.85	3.34	1530.50	1524.82	5.84	530.40	1521.30	1.40
	1.167	109.15	991.79	1174.06	4.35	7.40	4.22	1530.50	1525.80	5.83	179.20	1521.30	1.26
	1.292	990.73	1107.76	176.51	3.06	7.22	4.01	1532.20	1530.69	5.86	399.94	1526.50	1.61
	1.292	512.79	1762.21	.00	5.29	9.25	.00	1532.20	1531.46	5.66	95.90	1526.50	1.16
	1.413	544.96	1051.81	643.23	3.74	6.70	3.51	1538.40	1536.80	6.11	345.34	1532.10	1.32
*	1.413	192.51	1449.77	597.72	4.16	6.90	4.82	1538.40	1537.84	6.39	109.00	1532.10	1.11
*	1.553	667.11	802.31	469.58	3.56	8.10	4.25	1548.10	1545.55	8.75	364.48	1539.50	1.50
*	1.553	.00	1163.58	775.41	.00	10.32	5.95	1548.10	1546.05	8.21	101.90	1539.50	1.23
	1.678	737.71	700.16	501.13	3.44	6.38	3.48	1557.00	1553.18	7.63	422.96	1549.40	1.30
*	1.678	19.69	1087.53	831.78	3.09	6.98	4.81	1557.00	1554.19	8.14	120.00	1549.40	1.12
	1.818	828.13	352.33	685.54	3.21	5.38	3.84	1563.10	1560.44	7.26	592.03	1557.10	1.12
	1.818	541.36	696.96	627.68	5.95	7.85	6.14	1563.10	1561.17	6.98	113.50	1557.10	1.05
*	1.939	937.55	866.38	62.07	3.50	8.13	2.71	1571.10	1567.65	7.21	303.53	1563.40	1.68
	1.939	698.44	1167.56	.00	4.63	8.68	.00	1571.10	1568.58	7.41	104.80	1563.40	1.29
	2.057	13.43	557.26	1254.31	1.93	5.59	3.08	1574.30	1573.38	5.73	380.15	1570.10	1.28
	2.057	.00	837.72	987.28	.00	6.42	4.35	1574.30	1574.22	5.64	134.60	1570.10	1.12

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	2.148	17.22	942.62	865.15	2.31	7.57	3.05	1579.60	1578.57	5.19	406.00	1574.40	1.76
*	2.148	.00	1394.38	430.61	.00	9.99	5.65	1579.60	1578.97	4.75	79.00	1574.40	1.17
	2.204	385.72	589.02	850.26	4.64	6.58	3.33	1582.20	1581.14	2.56	466.84	1578.80	1.30
	2.204	102.45	904.43	818.12	4.25	6.64	4.68	1582.20	1582.12	3.15	140.00	1578.80	1.10
	2.242	452.40	887.98	484.62	3.90	7.02	3.46	1586.20	1584.59	3.46	332.92	1579.50	1.36

	2.242	.00	1372.74	452.26	.00	9.27	6.98	1586.20	1585.13	3.02	63.60	1579.50	1.04
	2.322	227.11	589.07	1008.82	2.55	7.33	5.28	1592.00	1588.81	4.21	277.96	1584.40	1.31
*	2.322	125.00	635.94	1064.06	3.83	6.29	5.04	1592.00	1589.63	4.50	100.00	1584.40	1.06
*	2.439	473.60	973.67	246.74	5.67	9.53	4.00	1597.40	1595.62	6.81	132.32	1590.10	1.35
*	2.439	.00	1390.45	303.55	.00	11.87	7.57	1597.40	1596.23	6.60	39.50	1590.10	1.08
*	2.523	81.33	1083.45	529.22	3.85	8.83	4.53	1601.10	1600.85	5.22	159.86	1595.20	1.35
*	2.523	57.05	992.53	644.42	3.37	6.72	3.71	1601.10	1601.57	5.34	129.30	1595.20	1.28
*	2.621	322.56	328.99	244.45	3.01	6.98	3.50	1607.50	1607.38	6.54	211.96	1604.20	1.53
*	2.621	7.36	550.39	338.24	3.06	10.03	6.24	1607.50	1607.85	6.27	44.00	1604.20	1.19
*	2.750	17.03	82.90	51.07	1.99	4.58	2.88	1614.30	1614.16	6.78	36.00	1611.30	1.28
*	2.750	30.52	65.64	54.84	1.40	2.51	1.77	1614.30	1615.12	7.27	36.00	1611.30	1.17
*	2.759	.00	151.00	.00	.00	7.89	.00	1618.50	1616.91	2.76	10.00	1615.00	1.00
*	2.759	.00	151.00	.00	.00	7.88	.00	1618.50	1616.92	1.80	10.00	1615.00	1.00
*	2.784	.00	151.00	.00	.00	6.00	.00	1618.90	1617.91	1.00	10.00	1615.40	1.00
*	2.784	.00	151.00	.00	.00	6.00	.00	1618.90	1617.91	1.00	10.00	1615.40	1.00
*	2.798	.00	151.00	.00	.00	4.91	.00	1618.50	1618.36	.44	27.88	1616.80	1.00
*	2.798	.00	151.00	.00	.00	4.91	.00	1618.50	1618.36	.44	27.88	1616.80	1.00
	-2.621	323.30	328.40	244.30	3.00	6.96	3.49	1607.50	1607.38	-10.98	213.30	1604.20	1.53
	-2.621	.00	537.20	358.80	.00	9.79	6.80	1607.50	1607.85	-10.51	42.30	1604.20	1.10
	12.725	253.89	160.74	351.37	4.36	7.03	4.83	1614.30	1613.38	6.00	99.50	1610.90	1.10
*	12.725	273.74	142.88	349.37	3.33	5.07	3.62	1614.30	1613.92	6.07	99.50	1610.90	1.08
	12.734	.00	766.00	.00	.00	6.35	.00	1616.80	1613.87	.48	77.00	1612.30	1.00
	12.734	.00	766.00	.00	.00	5.56	.00	1616.80	1614.08	.16	77.00	1612.30	1.00
*	12.760	.00	766.00	.00	.00	4.80	.00	1617.30	1614.87	1.00	77.00	1612.80	1.00
*	12.760	.00	766.00	.00	.00	4.82	.00	1617.30	1614.86	.78	77.00	1612.80	1.00
*	12.775	.00	766.00	.00	.00	6.32	.00	1617.00	1617.00	2.13	98.97	1615.50	1.00
*	12.775	.00	766.00	.00	.00	6.32	.00	1617.50	1617.00	2.13	98.97	1615.50	1.00
	-2.439	473.60	973.67	246.74	5.67	9.53	4.00	1597.40	1595.62	-21.38	132.32	1590.10	1.35
	-2.439	.00	1390.45	303.55	.00	11.87	7.57	1597.40	1596.23	-20.77	39.50	1590.10	1.08

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	22.523	1357.56	313.97	22.47	6.27	6.24	2.38	1601.60	1600.94	5.32	180.00	1595.20	1.03
*	22.523	1362.23	331.77	.00	4.75	4.88	.00	1601.60	1601.70	5.46	129.30	1595.20	1.00
*	22.617	302.08	439.92	74.00	2.73	6.29	3.00	1608.60	1608.15	7.21	257.83	1604.20	1.57
*	22.617	69.75	626.33	119.92	3.70	8.22	4.49	1608.60	1608.36	6.66	70.00	1604.20	1.25
	22.657	232.92	376.40	206.68	4.29	6.41	4.17	1610.50	1610.41	2.26	97.50	1608.10	1.14
	22.657	156.49	491.41	168.10	4.55	6.48	4.71	1610.50	1611.06	2.70	55.00	1608.10	1.08
*	22.669	.00	816.00	.00	.00	7.01	.00	1614.40	1611.41	1.00	77.00	1609.90	1.00
	22.669	.00	816.00	.00	.00	6.09	.00	1614.40	1611.64	.57	77.00	1609.90	1.00
*	22.697	.00	816.00	.00	.00	4.89	.00	1615.00	1612.67	1.25	77.00	1610.50	1.00
*	22.697	.00	816.00	.00	.00	4.92	.00	1615.00	1612.65	1.02	77.00	1610.50	1.00
	-2.322	227.76	588.65	1008.59	2.55	7.32	5.27	1592.00	1588.81	-23.86	278.04	1584.40	1.31

	-2.322	124.94	636.01	1064.05	3.83	6.30	5.04	1592.00	1589.63	-23.02	100.00	1584.40	1.06
*	32.418	3.06	88.93	42.01	.75	2.35	1.29	1597.40	1593.45	4.64	89.42	1590.10	1.30
*	32.418	.00	133.99	.00	.00	6.27	.05	1597.40	1592.56	2.93	18.35	1590.10	1.01
*	32.492	.00	125.76	8.24	.00	5.10	1.49	1601.10	1598.30	4.85	48.54	1595.20	1.24
*	32.492	.00	124.50	9.50	.00	4.07	1.94	1601.10	1598.59	6.03	28.89	1595.20	1.10
	32.558	6.51	127.25	.24	2.07	4.23	.99	1606.80	1603.50	5.20	37.57	1601.80	1.07
*	32.558	.00	134.00	.00	.00	5.37	.00	1606.80	1603.32	4.74	29.00	1601.80	1.00
*	32.575	18.23	75.78	39.99	2.53	5.13	3.48	1607.00	1605.36	1.85	56.71	1604.30	1.21
	32.575	23.32	94.37	16.32	3.15	5.19	3.71	1607.00	1605.58	2.25	30.00	1604.30	1.12
*	32.584	.00	134.00	.00	.00	4.07	.00	1610.80	1606.81	1.46	64.00	1606.30	1.00
*	32.584	.00	134.00	.00	.00	4.09	.00	1610.80	1606.81	1.23	64.00	1606.30	1.00
*	32.610	.00	134.00	.00	.00	2.83	.00	1611.50	1607.73	.92	64.00	1607.00	1.00
*	32.610	.00	134.00	.00	.00	2.83	.00	1611.50	1607.73	.92	64.00	1607.00	1.00
	-1.939	935.01	864.04	66.95	3.49	8.10	2.57	1571.10	1567.65	-40.09	312.11	1563.40	1.70
	-1.939	698.39	1167.61	.00	4.63	8.68	.00	1571.10	1568.58	-39.15	104.80	1563.40	1.29
*	42.070	3.41	45.15	13.44	.52	.90	.47	1574.30	1573.85	6.20	104.50	1570.10	1.23
*	42.070	.00	62.00	.00	.00	.88	.00	1574.30	1574.39	5.81	36.90	1570.10	1.00
*	42.130	1.05	60.94	.01	1.26	4.29	.05	1578.90	1576.67	2.82	31.26	1574.40	1.08
*	42.130	.00	62.00	.00	.00	4.75	.00	1578.90	1576.61	2.22	20.50	1574.40	1.00
*	42.200	.00	25.56	36.44	.00	2.05	1.88	1583.90	1580.94	4.28	53.18	1579.50	1.01
*	42.200	.00	62.00	.00	.00	2.70	.00	1583.90	1581.43	4.81	24.00	1579.50	1.00
*	42.299	.00	62.00	.00	.00	4.87	.00	1592.00	1586.41	5.46	15.31	1584.40	1.00
*	42.299	.00	62.00	.00	.00	4.30	.00	1592.00	1586.52	5.10	16.17	1584.40	1.00

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	42.401	13.38	38.09	10.53	2.96	4.70	2.84	1599.10	1597.60	11.19	20.00	1595.20	1.17
	42.401	.00	62.00	.00	.00	5.86	.00	1599.10	1597.90	11.38	7.90	1595.20	1.00
*	42.406	.00	62.00	.00	.00	6.60	.00	1602.40	1600.74	3.14	7.00	1599.40	1.00
*	42.406	.00	62.00	.00	.00	6.62	.00	1602.40	1600.74	2.84	7.00	1599.40	1.00
*	42.432	.00	62.00	.00	.00	3.58	.00	1603.00	1602.47	1.73	7.00	1600.00	1.00
*	42.432	.00	62.00	.00	.00	3.59	.00	1603.00	1602.47	1.73	7.00	1600.00	1.00
	42.436	4.53	52.69	4.78	.69	1.86	.69	1604.00	1602.70	.23	56.73	1600.50	1.37
	42.436	4.49	52.77	4.74	.69	1.87	.69	1604.00	1602.69	.23	56.52	1600.50	1.37
	-1.678	737.71	700.16	501.13	3.44	6.38	3.48	1557.00	1553.18	-49.52	422.96	1549.40	1.30
	-1.678	19.69	1087.56	831.75	3.09	6.99	4.81	1557.00	1554.19	-48.50	120.00	1549.40	1.12
*	51.836	26.07	54.84	1.09	.98	2.76	.51	1563.10	1561.32	8.15	117.44	1557.10	1.89
*	51.836	5.49	76.51	.00	1.37	4.66	.00	1563.10	1561.10	6.91	35.91	1557.10	1.27
*	51.980	74.48	7.52	.00	1.96	1.15	.00	1571.10	1569.50	8.17	210.69	1563.40	1.07
*	51.980	41.08	40.92	.00	1.17	1.21	.00	1571.10	1569.90	8.80	126.20	1563.40	1.00
*	52.080	21.30	32.55	28.15	1.26	2.19	1.62	1577.90	1577.08	7.58	132.26	1575.90	1.16
*	52.080	.00	82.00	.00	.00	4.68	.00	1577.90	1577.18	7.28	26.90	1575.90	1.00
*	52.175	3.45	12.58	65.98	1.54	2.05	2.30	1584.40	1583.44	6.36	129.80	1582.60	1.02

*	52.175	.00	82.00	.00	.00	3.00	.00	1584.40	1584.33	7.16	23.70	1582.60	1.00
	52.248	.00	82.00	.00	.03	3.15	.03	1590.00	1589.03	5.58	37.76	1588.00	1.00
*	52.248	.00	82.00	.00	.00	4.24	.00	1590.00	1588.83	4.49	31.59	1588.00	1.00
*	52.259	.00	82.00	.00	.00	6.24	.00	1593.70	1591.90	2.87	11.00	1590.50	1.00
*	52.259	.00	82.00	.00	.00	6.23	.00	1593.70	1591.90	3.07	11.00	1590.50	1.00
*	52.285	.00	82.00	.00	.00	3.04	.00	1594.10	1593.55	1.65	11.00	1590.90	1.00
*	52.285	.00	82.00	.00	.00	3.04	.00	1594.10	1593.55	1.65	11.00	1590.90	1.00
*	52.289	.00	80.76	1.24	.00	4.46	1.76	1595.00	1593.52	-.03	19.55	1592.00	1.03
*	52.289	.00	80.70	1.30	.00	4.46	1.95	1595.00	1593.52	-.03	18.90	1592.00	1.03
	-1.413	544.94	1051.85	643.20	3.74	6.70	3.51	1539.70	1536.80	-56.72	345.32	1532.10	1.32
	-1.413	192.39	1450.15	597.46	4.17	6.91	4.83	1539.70	1537.84	-55.68	109.00	1532.10	1.11
*	61.538	23.67	251.44	74.88	1.51	5.11	4.24	1543.80	1542.76	5.96	118.56	1539.90	1.27
*	61.538	.00	350.00	.00	.00	6.74	.00	1543.80	1542.83	4.99	39.00	1539.90	1.00
	61.690	25.65	227.94	96.41	1.88	3.49	1.90	1554.20	1552.97	10.21	216.70	1550.40	1.26
*	61.690	.00	350.00	.00	.00	3.70	.00	1554.20	1553.45	10.61	63.20	1550.40	1.00
	61.811	30.49	142.11	177.40	2.66	6.52	3.85	1563.10	1561.14	8.17	93.87	1558.30	1.30
*	61.811	7.76	229.23	113.01	2.20	8.37	6.26	1563.10	1561.61	8.16	30.00	1558.30	1.15

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	61.936	38.02	217.06	94.93	1.90	4.79	1.34	1571.10	1569.85	8.71	286.71	1567.20	2.29
*	61.936	3.73	345.05	1.22	2.04	5.77	1.54	1571.10	1570.46	8.85	26.00	1567.20	1.05
*	62.027	214.45	132.51	3.04	3.05	5.25	.82	1577.90	1575.26	5.41	169.51	1573.20	1.30
*	62.027	.00	350.00	.00	.00	7.97	.00	1577.90	1576.19	5.73	20.10	1573.20	1.00
*	62.074	.00	307.84	42.16	.00	5.68	2.35	1581.00	1580.56	5.30	82.91	1578.20	1.23
	62.074	.00	350.00	.00	.00	5.26	.00	1581.00	1580.87	4.68	42.58	1578.20	1.00
*	62.087	.00	350.00	.00	.00	5.28	.00	1583.20	1581.40	.84	39.00	1579.70	1.00
*	62.087	.00	350.00	.00	.00	4.82	.00	1583.20	1581.57	.70	39.00	1579.70	1.00
*	62.114	.00	350.00	.00	.00	3.16	.00	1583.90	1583.24	1.84	39.00	1580.40	1.00
*	62.114	.00	350.00	.00	.00	3.16	.00	1583.90	1583.24	1.67	39.00	1580.40	1.00
*	62.127	.00	347.40	2.60	.00	6.86	1.64	1584.50	1584.36	1.13	40.71	1581.20	1.04
*	62.127	.00	347.41	2.59	.00	6.87	1.64	1584.50	1584.36	1.13	40.70	1581.20	1.04

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WASH NO.4 100-YEAR PROF

SUMMARY PRINTOUT

SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
.159	.00	.00	1476.60	.10	.00	.00	79.59	.00	2.10	49.00	42.00	49.00
.159	.00	.00	1477.75	.25	.00	.00	79.30	.00	3.10	49.00	42.00	49.00
.273	630.00	7.62	1481.26	.08	4.65	.00	63.75	14.66	1.98	49.00	42.00	49.00
.273	630.00	7.62	1482.04	.16	4.28	.01	56.75	9.76	2.67	49.00	42.00	49.00

*	.417	750.00	6.27	1487.87	.44	6.50	.11	136.75	27.42	3.52	49.00	42.00	49.00
*	.417	750.00	6.27	1489.09	.66	5.79	.15	118.73	19.43	4.53	49.00	42.00	49.00
	.564	585.00	6.32	1493.91	.49	6.03	.02	80.90	34.36	5.81	49.00	42.00	49.00
	.564	585.00	6.32	1495.16	.96	5.98	.09	88.93	24.50	6.60	49.00	42.00	49.00
	.689	710.00	10.14	1500.45	.24	6.52	.03	108.33	43.67	5.41	49.00	42.00	49.00
	.689	710.00	10.14	1501.48	.42	6.26	.05	90.10	30.96	6.27	49.00	42.00	.00
	.795	650.00	12.92	1506.24	.14	5.78	.01	89.95	53.08	2.90	49.00	42.00	49.00
	.795	650.00	12.92	1507.34	.40	5.85	.00	106.98	37.40	3.74	49.00	42.00	49.00
	.917	730.00	9.04	1512.39	.20	6.14	.02	102.10	63.65	2.40	49.00	42.00	49.00
	.917	730.00	9.04	1513.47	.23	6.12	.02	82.50	45.41	3.44	.00	42.00	49.00
	1.038	705.00	8.94	1519.18	.19	6.78	.00	97.22	73.97	2.88	49.00	42.00	49.00
	1.038	705.00	8.94	1520.36	.39	6.84	.05	123.61	53.68	3.87	.00	42.00	49.00
	1.167	645.00	8.06	1525.17	.34	5.94	.04	88.25	83.18	3.52	49.00	42.00	49.00
	1.167	645.00	8.06	1526.33	.53	5.92	.04	70.93	60.33	4.50	49.00	42.00	49.00
	1.292	670.00	7.76	1531.16	.48	5.96	.04	89.21	91.61	4.19	49.00	42.00	49.00
	1.292	670.00	7.76	1532.58	1.13	6.08	.18	119.07	65.93	4.96	49.00	42.00	.00
	1.413	720.00	7.78	1537.23	.44	6.07	.00	81.13	99.83	4.70	49.00	42.00	49.00
*	1.413	720.00	7.78	1538.44	.60	5.80	.05	58.32	71.42	5.74	49.00	42.00	49.00
*	1.553	730.00	10.14	1546.11	.56	6.54	.04	105.83	107.04	6.05	49.00	42.00	49.00
*	1.553	730.00	10.14	1547.26	1.21	6.21	.18	150.15	76.59	6.55	.00	42.00	49.00
	1.678	730.00	13.56	1553.52	.35	7.40	.02	101.10	114.11	3.78	49.00	42.00	49.00
*	1.678	730.00	13.56	1554.78	.58	7.45	.06	76.02	81.33	4.79	49.00	42.00	49.00
	1.818	725.00	10.62	1560.68	.24	7.15	.01	93.26	122.33	3.34	49.00	42.00	49.00
	1.818	725.00	10.62	1561.89	.71	7.07	.04	132.41	86.43	4.07	49.00	42.00	49.00
*	1.939	680.00	9.26	1568.22	.58	6.63	.10	102.66	129.33	4.25	49.00	42.00	49.00
	1.939	680.00	9.26	1569.44	.86	7.51	.04	93.94	90.85	5.18	49.00	42.00	.00
	2.057	670.00	10.00	1573.63	.25	5.38	.03	67.75	136.09	3.28	49.00	42.00	49.00
	2.057	670.00	10.00	1574.67	.45	5.19	.04	67.55	95.65	4.12	.00	42.00	49.00

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	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
*	2.148	550.00	7.82	1579.10	.53	4.18	.08	96.83	141.55	4.17	49.00	42.00	49.00
*	2.148	550.00	7.82	1580.27	1.30	5.19	.25	153.90	99.10	4.57	.00	42.00	49.00
	2.204	200.00	22.00	1581.50	.37	2.39	.02	150.59	143.49	2.34	49.00	42.00	49.00
	2.204	200.00	22.00	1582.62	.51	2.28	.08	87.50	100.36	3.32	49.00	42.00	49.00
	2.242	350.00	2.00	1585.07	.48	3.54	.03	87.93	146.31	5.09	49.00	42.00	49.00
	2.242	350.00	2.00	1586.32	1.19	3.50	.20	136.09	102.36	5.63	.00	42.00	49.00
	2.322	470.00	10.43	1589.33	.52	4.24	.01	94.10	150.28	4.41	49.00	42.00	49.00
*	2.322	470.00	10.43	1590.09	.46	3.69	.07	51.22	105.36	5.23	49.00	42.00	49.00
*	2.439	620.00	9.19	1596.61	.99	6.47	.14	115.98	154.63	5.52	49.00	42.00	49.00
*	2.439	620.00	9.19	1598.19	1.95	5.33	.45	181.76	108.96	6.13	.00	42.00	49.00
*	2.523	425.00	12.00	1601.73	.88	4.89	.01	114.05	157.11	5.65	49.00	42.00	49.00
*	2.523	425.00	12.00	1602.07	.50	3.74	.15	51.71	111.38	6.37	49.00	42.00	49.00

*	2.621	550.00	16.36	1607.76	.38	5.98	.05	99.72	160.17	3.18	49.00	42.00	49.00
*	2.621	550.00	16.36	1609.03	1.19	3.97	.21	168.10	114.22	3.65	49.00	42.00	49.00
*	2.750	710.00	10.00	1614.39	.23	6.61	.02	64.43	162.39	2.86	49.00	42.00	49.00
*	2.750	710.00	10.00	1615.18	.07	6.04	.11	11.83	115.75	3.82	49.00	42.00	49.00
*	2.759	50.00	74.00	1617.88	.97	.55	.37	223.59	162.42	1.91	.00	35.00	.00
*	2.759	50.00	74.00	1617.88	.96	.16	.45	223.08	115.81	1.92	.00	35.00	.00
*	2.784	133.00	3.01	1618.47	.56	.59	.00	11.80	162.49	2.51	.00	12.00	.00
*	2.784	133.00	3.01	1618.47	.56	.59	.00	11.80	115.87	2.51	.00	12.00	.00
*	2.798	75.00	18.67	1618.73	.37	.21	.06	119.54	162.54	1.56	.00	35.00	.00
*	2.798	75.00	18.67	1618.73	.37	.21	.06	119.61	115.92	1.56	.00	35.00	.00
	-2.621	550.00	.00	1607.76	.38	.00	.00	99.19	164.15	3.18	49.00	42.00	49.00
	-2.621	550.00	.00	1609.03	1.18	.00	.00	195.56	116.80	3.65	.00	42.00	49.00
	12.725	550.00	12.18	1613.81	.43	6.04	.01	129.57	166.51	2.48	49.00	42.00	49.00
*	12.725	550.00	12.18	1614.15	.23	5.03	.10	51.19	118.72	3.02	49.00	42.00	49.00
	12.734	45.00	31.11	1614.49	.63	.58	.10	129.68	166.65	1.57	.00	35.00	.00
	12.734	45.00	31.11	1614.56	.48	.29	.13	83.87	118.90	1.78	.00	35.00	.00
*	12.760	137.00	3.65	1615.23	.36	.74	.00	6.11	167.09	2.07	.00	12.00	.00
*	12.760	137.00	3.65	1615.22	.36	.66	.00	6.16	119.37	2.06	.00	12.00	.00
*	12.775	80.00	33.75	1617.62	.62	.14	.13	169.84	167.35	1.50	.00	35.00	.00
*	12.775	80.00	33.75	1617.62	.62	.14	.13	169.74	119.62	1.50	.00	35.00	.00
	-2.439	620.00	.00	1596.61	.99	8.05	-8.05	115.98	169.98	5.52	49.00	42.00	49.00
	-2.439	620.00	.00	1598.19	1.95	11.04	-11.04	181.76	121.61	6.13	.00	42.00	49.00

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	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	22.523	425.00	12.00	1601.54	.60	4.89	.04	114.37	172.54	5.74	49.00	42.00	49.00
*	22.523	425.00	12.00	1602.05	.35	3.70	.16	50.96	124.11	6.50	49.00	42.00	.00
*	22.617	495.00	18.18	1608.54	.39	5.61	.02	104.69	175.33	3.95	49.00	42.00	49.00
*	22.617	495.00	18.18	1609.23	.87	3.47	.15	159.44	126.87	4.16	49.00	42.00	49.00
	22.657	210.00	18.57	1610.85	.44	2.30	.02	112.69	176.23	2.31	49.00	42.00	49.00
	22.657	210.00	18.57	1611.59	.53	2.33	.03	81.64	127.52	2.96	49.00	42.00	49.00
*	22.669	65.00	27.69	1612.17	.76	.88	.16	165.54	176.44	1.51	.00	35.00	.00
	22.669	65.00	27.69	1612.21	.58	.60	.03	104.34	127.73	1.74	.00	35.00	.00
*	22.697	148.00	4.05	1613.04	.37	.86	.00	5.98	176.92	2.17	.00	12.00	.00
*	22.697	148.00	4.05	1613.03	.38	.82	.00	6.11	128.24	2.15	.00	12.00	.00
	-2.322	470.00	.00	1589.33	.52	.00	.00	93.76	179.75	4.41	49.00	42.00	49.00
	-2.322	470.00	.00	1590.09	.46	.00	.00	51.32	130.98	5.23	49.00	42.00	49.00
*	32.418	555.00	10.27	1593.51	.06	4.14	.05	18.17	182.33	3.35	49.00	42.00	49.00
*	32.418	555.00	10.27	1593.17	.61	2.95	.04	257.97	133.13	2.46	.00	42.00	49.00
*	32.492	415.00	12.29	1598.68	.38	1.68	.09	163.61	182.82	3.10	.00	42.00	49.00
*	32.492	415.00	12.29	1598.83	.24	5.62	.04	83.47	133.40	3.39	.00	42.00	49.00
	32.558	340.00	19.41	1603.77	.27	5.08	.01	136.93	183.07	1.70	49.00	42.00	49.00
*	32.558	340.00	19.41	1603.77	.45	4.83	.06	293.75	133.64	1.52	.00	42.00	.00

*	32.575	95.00	26.32	1605.66	.30	1.65	.01	230.06	183.14	1.06	49.00	42.00	49.00
	32.575	95.00	26.32	1605.92	.35	2.14	.01	178.28	133.70	1.28	49.00	42.00	49.00
*	32.584	50.00	40.00	1607.07	.26	1.15	.01	228.49	183.18	.51	.00	35.00	.00
*	32.584	50.00	40.00	1607.07	.26	1.01	.03	230.85	133.73	.51	.00	35.00	.00
*	32.610	135.00	5.18	1607.86	.12	.79	.00	8.08	183.30	.73	.00	12.00	.00
*	32.610	135.00	5.18	1607.86	.12	.79	.00	8.08	133.86	.73	.00	12.00	.00
	-1.939	680.00	.00	1568.22	.57	.00	.00	102.10	186.80	4.25	49.00	42.00	49.00
	-1.939	680.00	.00	1569.44	.86	.00	.00	93.97	136.45	5.18	49.00	42.00	.00
*	42.070	690.00	9.71	1573.86	.01	5.58	.06	4.31	190.65	3.75	49.00	42.00	49.00
*	42.070	690.00	9.71	1574.41	.01	4.88	.08	2.86	139.27	4.29	.00	42.00	.00
*	42.130	320.00	13.44	1576.95	.28	.43	.08	255.86	191.01	2.27	49.00	42.00	49.00
*	42.130	320.00	13.44	1576.96	.35	.31	.10	333.06	139.58	2.21	.00	42.00	.00
*	42.200	370.00	13.78	1581.00	.06	4.03	.02	60.01	191.21	1.44	.00	42.00	49.00
*	42.200	370.00	13.78	1581.54	.11	4.55	.02	63.50	139.73	1.93	.00	42.00	.00
*	42.299	525.00	9.33	1586.77	.37	5.68	.09	250.49	191.48	2.01	.00	42.00	.00
*	42.299	525.00	9.33	1586.81	.29	5.22	.05	177.23	139.96	2.12	.00	42.00	.00

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	SECNO	XLCH	K*CHSL	EG	HV	HL	DLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	42.401	540.00	20.00	1597.86	.26	11.07	.01	171.48	191.66	2.40	49.00	42.00	49.00
	42.401	540.00	20.00	1598.44	.53	11.55	.07	263.37	140.11	2.70	.00	42.00	.00
*	42.406	25.00	168.00	1601.42	.68	.51	.21	251.27	191.67	1.34	.00	35.00	.00
*	42.406	25.00	168.00	1601.42	.68	.65	.07	253.52	140.12	1.34	.00	35.00	.00
*	42.432	135.00	4.44	1602.67	.20	1.25	.00	20.41	191.71	2.47	.00	24.00	.00
*	42.432	135.00	4.44	1602.67	.20	1.25	.00	20.53	140.16	2.47	.00	24.00	.00
	42.436	20.00	25.00	1602.74	.05	.03	.05	10.73	191.72	2.20	35.00	35.00	35.00
	42.436	20.00	25.00	1602.74	.05	.03	.05	10.84	140.17	2.19	35.00	35.00	35.00
	-1.678	730.00	.00	1553.52	.35	.00	.00	101.10	195.89	3.78	49.00	42.00	49.00
	-1.678	730.00	.00	1554.78	.58	.00	.00	76.05	143.26	4.79	49.00	42.00	49.00
*	51.836	820.00	9.39	1561.41	.08	7.86	.03	46.29	200.63	4.22	49.00	42.00	49.00
*	51.836	820.00	9.39	1561.42	.32	6.34	.03	172.30	146.53	4.00	49.00	42.00	.00
*	51.980	725.00	8.69	1569.55	.06	6.27	.00	230.60	201.39	6.10	49.00	42.00	.00
*	51.980	725.00	8.69	1569.92	.02	4.26	11.34	29.74	147.26	6.50	49.00	42.00	.00
*	52.080	580.00	21.55	1577.13	.05	7.57	.00	85.13	202.01	1.18	49.00	42.00	49.00
*	52.080	580.00	21.55	1577.52	.34	4.13	.10	347.55	147.84	1.28	.00	42.00	.00
*	52.175	520.00	12.88	1583.52	.08	6.38	.01	203.36	202.51	.84	49.00	42.00	49.00
*	52.175	520.00	12.88	1584.47	.14	6.94	.02	69.99	148.10	1.73	.00	42.00	.00
	52.248	370.00	14.59	1589.18	.15	5.64	.02	118.29	202.78	1.03	49.00	42.00	49.00
*	52.248	370.00	14.59	1589.11	.28	4.59	.04	277.91	148.30	.83	.00	42.00	.00
*	52.259	60.00	41.67	1592.50	.60	.95	.22	221.34	202.81	1.40	.00	35.00	.00
*	52.259	60.00	41.67	1592.50	.60	1.48	.16	220.99	148.32	1.40	.00	35.00	.00
*	52.285	137.00	2.92	1593.69	.14	1.19	.00	11.96	202.87	2.65	.00	24.00	.00
*	52.285	137.00	2.92	1593.69	.14	1.19	.00	11.96	148.39	2.65	.00	24.00	.00

*	52.289	20.00	55.00	1593.83	.31	.05	.08	102.85	202.88	1.52	.00	35.00	35.00
*	52.289	20.00	55.00	1593.83	.30	.05	.08	102.50	148.40	1.52	.00	35.00	35.00
	-1.413	720.00	.00	1537.23	.44	.00	.00	81.14	207.02	4.70	49.00	42.00	49.00
	-1.413	720.00	.00	1538.44	.60	.00	.00	58.58	151.68	5.74	49.00	42.00	49.00
*	61.538	680.00	11.47	1543.12	.35	5.87	.01	154.72	211.37	2.86	49.00	42.00	49.00
*	61.538	680.00	11.47	1543.54	.70	4.58	.03	253.87	155.00	2.93	.00	42.00	.00
	61.690	850.00	12.35	1553.12	.14	9.98	.02	94.53	213.40	2.57	49.00	42.00	49.00
*	61.690	850.00	12.35	1553.66	.21	10.07	.05	68.32	156.43	3.05	.00	42.00	.00
	61.811	680.00	11.62	1561.54	.39	8.34	.08	165.62	215.03	2.84	49.00	42.00	49.00
*	61.811	680.00	11.62	1562.52	.91	7.46	.21	204.15	157.55	3.31	49.00	42.00	49.00

	SECNO	XLCH	K*CHSL	EG	HV	HL	DLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
*	61.936	700.00	12.71	1570.09	.23	7.62	.02	79.91	216.71	2.65	49.00	42.00	49.00
*	61.936	700.00	12.71	1570.97	.51	8.42	.04	80.16	158.44	3.26	49.00	42.00	49.00
*	62.027	490.00	12.24	1575.51	.25	5.42	.00	164.31	218.02	2.06	49.00	42.00	49.00
*	62.027	490.00	12.24	1577.18	.99	6.06	.14	215.61	159.04	2.99	.00	42.00	.00
*	62.074	250.00	20.00	1581.01	.45	4.20	.06	171.75	218.51	2.36	.00	42.00	49.00
	62.074	250.00	20.00	1581.30	.43	4.06	.06	126.85	159.35	2.67	.00	42.00	.00
*	62.087	70.00	21.43	1581.84	.43	.82	.01	85.36	218.63	1.70	.00	35.00	.00
*	62.087	70.00	21.43	1581.93	.36	.61	.02	63.36	159.46	1.87	.00	35.00	.00
*	62.114	141.00	4.96	1583.39	.16	1.56	.00	1.94	218.91	2.84	.00	12.00	.00
*	62.114	141.00	4.96	1583.39	.16	1.47	.00	1.95	159.76	2.84	.00	12.00	.00
*	62.127	70.00	11.43	1585.09	.73	.04	.29	146.11	219.04	3.16	.00	35.00	35.00
*	62.127	70.00	11.43	1585.09	.73	.04	.29	146.22	159.89	3.16	.00	35.00	35.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .417  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=      .417  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .417  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     1.413  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.553  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.553  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.553  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.553  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.553  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     1.678  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.939  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.939  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=      2.148  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.148  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.148  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.148  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      2.322  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      2.439  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.439  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.439  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.439  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.439  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=      2.523  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.523  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=      2.523  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      2.621  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=      2.621  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.621  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.621  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      2.750  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      2.750  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      2.759  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.759  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.759  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=      2.759  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.759  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      2.759  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      2.784  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      2.784  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
1
   06MAY93      11:42:09                                                                    PAGE   93


WARNING SECNO=      2.798  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      2.798  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     12.725  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     12.760  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     12.760  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     12.775  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.775  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     12.775  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     12.775  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.775  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     12.775  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     22.523  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     22.617  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.617  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.617  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.617  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.617  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     22.669  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.669  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     22.697  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=     22.697  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     32.418  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     32.418  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     32.418  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     32.418  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     32.492  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     32.492  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     32.492  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=     32.492  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     32.558  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     32.558  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     32.575  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     32.575  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     32.584  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     32.584  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     32.584  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     32.584  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     32.610  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     32.610  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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   06MAY93      11:42:09                                                                    PAGE   94


WARNING SECNO=     42.070  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     42.070  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     42.130  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     42.130  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     42.130  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     42.130  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     42.130  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     42.130  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     42.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     42.200  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     42.299  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     42.299  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     42.406  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     42.406  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     42.406  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     42.406  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     42.406  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     42.406  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     42.432  PROFILE=  1  HYDRAULIC JUMP D.S.
WARNING SECNO=     42.432  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     42.432  PROFILE=  2  HYDRAULIC JUMP D.S.
WARNING SECNO=     42.432  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     51.836  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     51.836  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     51.836  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     51.836  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     51.980  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     51.980  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     51.980  PROFILE=  2  WSEL ASSUMED BASED ON MIN DIFF
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CAUTION SECNO=     51.980  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     52.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     52.080  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     52.080  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     52.080  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     52.175  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     52.175  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     52.248  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     52.259  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     52.259  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     52.259  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     52.259  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     52.259  PROFILE=  2  MINIMUM SPECIFIC ENERGY
1
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CAUTION SECNO=     52.285  PROFILE=  1  HYDRAULIC JUMP D.S.
WARNING SECNO=     52.285  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     52.285  PROFILE=  2  HYDRAULIC JUMP D.S.
WARNING SECNO=     52.285  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     52.289  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     52.289  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     61.538  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     61.538  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     61.538  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     61.538  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     61.690  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     61.811  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     61.811  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     61.936  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     61.936  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     61.936  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     62.027  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     62.027  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     62.074  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     62.074  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     62.087  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     62.087  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     62.114  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     62.114  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     62.127  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     62.127  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     62.127  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     62.127  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     62.127  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     62.127  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

1
   06MAY93      11:42:09                                                                                    PAGE   96
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FLOODWAY DATA, WASH NO.4 100-YEAR PROF
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.159	353.	580.	3.9	1477.5	1476.5	1.0
.273	530.	739.	3.1	1481.9	1481.2	.7
.417	280.	423.	5.4	1488.4	1487.4	1.0
.564	173.	332.	6.9	1494.2	1493.4	.8
.689	289.	478.	4.8	1501.1	1500.2	.9
.795	299.	482.	4.7	1506.9	1506.1	.8
.917	417.	592.	3.8	1513.2	1512.2	1.0
1.038	277.	461.	4.9	1520.0	1519.0	1.0
1.167	179.	437.	5.2	1525.8	1524.8	1.0
1.292	96.	287.	7.9	1531.5	1530.7	.8
1.413	109.	380.	5.9	1537.8	1536.8	1.0
1.553	102.	243.	8.0	1546.0	1545.5	.5
1.678	120.	335.	5.8	1554.2	1553.2	1.0
1.818	113.	282.	6.6	1561.1	1560.4	.7
1.939	105.	285.	6.5	1568.5	1567.6	.9
2.057	135.	357.	5.1	1574.2	1573.4	.8
2.148	79.	216.	8.5	1579.0	1578.6	.4
2.204	140.	335.	5.4	1582.1	1581.1	1.0
2.242	64.	213.	8.6	1585.1	1584.6	.5
2.322	100.	345.	5.3	1589.6	1588.8	.8
2.439	39.	157.	10.8	1596.2	1595.6	.6
2.523	129.	338.	5.0	1601.5	1600.8	.7
2.621	44.	112.	8.0	1607.9	1607.4	.5
2.750	36.	79.	1.9	1615.2	1614.2	1.0
2.759	10.	19.	7.9	1616.9	1616.9	.0
2.784	10.	25.	6.0	1617.9	1617.9	.0
2.798	28.	31.	4.9	1618.4	1618.4	.0
-2.621	42.	108.	8.3	1607.9	1607.4	.5
12.725	99.	207.	3.7	1613.9	1613.4	.5
12.734	77.	138.	5.6	1614.1	1613.9	.2
12.760	77.	159.	4.8	1614.9	1614.9	.0
12.775	99.	121.	6.3	1617.0	1617.0	.0
-2.439	39.	157.	10.8	1596.2	1595.6	.6
22.523	129.	355.	4.8	1601.7	1600.9	.8
22.617	70.	122.	6.7	1608.4	1608.2	.2
22.657	55.	146.	5.6	1611.1	1610.4	.7
22.669	77.	134.	6.1	1611.6	1611.4	.2
22.697	77.	166.	4.9	1612.7	1612.7	.0
-2.322	100.	345.	5.3	1589.6	1588.8	.8
32.418	18.	21.	6.2	1592.5	1593.4	-.9
32.492	29.	35.	3.8	1598.6	1598.3	.3
32.558	29.	25.	5.4	1603.3	1603.5	-.2

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FLOODWAY DATA, WASH NO.4 100-YEAR PROF
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE

32.575	30.	30.	4.5	1605.6	1605.4	.2
32.584	64.	33.	4.1	1606.8	1606.8	.0
32.610	64.	47.	2.8	1607.7	1607.7	.0
-1.939	105.	285.	6.5	1568.5	1567.6	.9
42.070	37.	71.	.9	1574.3	1573.8	.5
42.130	21.	13.	4.8	1576.6	1576.7	-.1
42.200	24.	23.	2.7	1581.4	1580.9	.5
42.299	16.	14.	4.3	1586.5	1586.4	.1
42.401	8.	11.	5.9	1597.9	1597.6	.3
42.406	7.	9.	6.6	1600.7	1600.7	.0
42.432	7.	17.	3.6	1602.5	1602.5	.0
42.436	57.	42.	1.5	1602.7	1602.7	.0
-1.678	120.	335.	5.8	1554.2	1553.2	1.0
51.836	36.	20.	4.0	1561.1	1561.3	-.2
51.980	126.	69.	1.2	1569.9	1569.5	.4
52.080	27.	18.	4.7	1577.2	1577.1	.1
52.175	24.	27.	3.0	1584.3	1583.4	.9
52.248	32.	19.	4.2	1588.8	1589.0	-.2
52.259	11.	13.	6.2	1591.9	1591.9	.0
52.285	11.	27.	3.0	1593.5	1593.5	.0
52.289	19.	19.	4.4	1593.5	1593.5	.0
-1.413	109.	380.	5.9	1537.8	1536.8	1.0
61.538	39.	52.	6.7	1542.9	1542.8	.1
61.690	63.	95.	3.7	1553.5	1553.0	.5
61.811	30.	49.	7.1	1561.6	1561.1	.5
61.936	26.	62.	5.6	1570.5	1569.9	.6
62.027	20.	44.	8.0	1576.2	1575.3	.9
62.074	43.	67.	5.3	1580.9	1580.6	.3
62.087	39.	73.	4.8	1581.6	1581.4	.2
62.114	39.	111.	3.2	1583.2	1583.2	.0
62.127	41.	52.	6.7	1584.4	1584.4	.0

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1*****************************************
 * HEC-2 WATER SURFACE PROFILES          *
 *                                       *
 * Version   4.6.0;  February 1991       *
 *                                       *
 * RUN DATE    06MAY93    TIME   11:47:04 *
 *****************************************
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*************************************
 * U.S. ARMY CORPS OF ENGINEERS      *
 * HYDROLOGIC ENGINEERING CENTER     *
 * 609 SECOND STREET, SUITE D        *
 * DAVIS, CALIFORNIA 95616-4687      *
 *        (916) 756-1104             *
 *************************************
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X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                 X
X     X  X        X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
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06MAY93 11:47:04 PAGE 1

THIS RUN EXECUTED 06MAY93 11:47:04

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

 Version   4.6.0;  February 1991
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T1      SUN VALLEY PARKWAY NORTH FIS.  CONTRACT:FCDMC NO. 90-04   FILE:WASH5-2
T2      100-YEAR WATER SURFACE PROFILE              A-N WEST INC. PHX. AZ.
T3      WASH NO. 5  100-YEAR PROFILE                  DATE: 6\27\91;REV.8\6\91

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC    HVINS     Q        WSEL     FQ

      0        2                 0     .00B1                                  1468

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC     IBW      CHNIM    ITRACE

     1                 -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       43        1        2       26       39       21       22       27       28
    53       54        0       38       13       14       15       55       26       56
    63        1       51        4       42       57        0       38       39       33
     3       10       11       12        5        7        8       16       17       18
     0      200

NC    .049     .049     .042       .1       .3
QT       2     2469     2469
ET                      9.1                                                  10054.4   10523.17
```

FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
ANALYSIS BY EQUAL CONVEYANCE REDUCTION METHOD (METHOD 4).
STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
CONFLUENCE WITH WASH 5 WEST ALONG BASELINE.
CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
CROZIER ROAD (219 TH AVE) CROSSES 100 FT. UPSTREAM OF THIS SECTION
AS AN AT-GRADE CROSSING (A.K.A. DIP SECTION)

X1	.0587	95	10054.4	10069.7	0	0	0			
GR	1468.3	9500	1466.8	9856.5	1467.8	9862.6	1467.1	9866.2	1467.1	9875.6
GR	1467.3	9889.4	1467.5	9903.2	1467.6	9920.3	1467.5	9936.7	1467.6	9957.0
GR	1467.7	10014.9	1467.7	10027.0	1467.6	10038.6	1467.6	10048.8	1467.4	10054.4
GR	1465.0	10058.5	1464.9	10066.1	1466.0	10069.7	1466.3	10074.6	1467.5	10083.6
GR	1467.7	10247.4	1467.5	10264.1	1467.4	10282.7	1467.3	10304.1	1467.3	10329.7

GR	1467.4	10408.1	1467.6	10429.3	1467.6	10450.4	1467.9	10467.4	1467.6	10483.8
GR	1467.6	10564.6	1467.6	10582.1	1467.6	10599.1	1467.6	10613.5	1467.8	10627.7
GR	1467.6	10635.4	1466.8	10641.5	1467.3	10647.1	1467.5	10654.3	1467.4	10668.9
GR	1467.2	10738.6	1467.3	10751.5	1467.6	10762.5	1467.8	10774.8	1467.2	10786.0
GR	1467.4	10798.9	1467.7	10809.9	1467.7	10819.8	1467.7	10831.4	1467.8	10845.7
GR	1467.9	10858.4	1468.0	10869.5	1467.8	10879.7	1468.3	10891.6	1467.9	10899.1
GR	1467.7	10908.2	1467.4	10917.2	1467.3	10929.6	1467.5	10938.6	1467.5	10944.7
GR	1467.9	10956.2	1467.2	10968.7	1466.9	10978.6	1466.8	10992.1	1466.6	11003.2
GR	1466.6	11012.5	1466.8	11023.1	1466.9	11046.2	1467.1	11075.6	1467.0	11101.0
GR	1467.2	11169.9	1467.1	11187.6	1467.0	11200.5	1467.2	11212.4	1466.9	11225.0
GR	1466.6	11293.8	1466.1	11299.7	1466.9	11307.0	1466.7	11312.1	1466.3	11316.7
GR	1466.8	11324.4	1467.0	11335.3	1466.9	11351.8	1466.8	11367.6	1466.4	11377.9
GR	1466.0	11383.7	1466.2	11388.6	1466.6	11393.8	1466.6	11403.0	1466.7	11410.1
GR	1466.7	11416.5	1466.5	11424.1	1466.8	11432.1	1467.1	11445.2	1468.3	11700

ET		7.1	9.1				9507.4	11645.2	9669.2	10325

ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
ON LEFT SIDE AT THIS SECTION.

X1	.1534	95	9669.2	9711.4	680	500	680			
GR	1472.7	9304.8	1473.0	9370.0	1473.0	9374.6	1471.8	9381.6	1470.4	9386.5
GR	1470.8	9390.4	1472.0	9394.4	1472.4	9397.9	1472.5	9399.3	1471.3	9402.6
GR	1471.7	9405.1	1473.0	9408.6	1473.0	9414.0	1472.7	9418.6	1472.7	9426.1
GR	1473.1	9507.4	1472.9	9525.4	1472.7	9540.1	1472.5	9552.5	1472.6	9569.1
GR	1472.3	9663.6	1472.5	9669.2	1471.9	9674.1	1470.8	9680.1	1470.8	9684.1
GR	1471.1	9689.3	1471.0	9692.3	1470.6	9698.0	1471.5	9703.3	1472.1	9711.4
GR	1472.5	9918.8	1472.7	9933.3	1472.6	9949.3	1472.8	9958.1	1473.0	9970.7
GR	1472.9	10017.3	1473.3	10023.5	1473.2	10027.1	1472.7	10036.1	1472.7	10044.4
GR	1472.8	10056.4	1472.7	10064.4	1472.6	10077.7	1472.5	10088.1	1472.3	10099.7
GR	1472.5	10191.5	1472.3	10197.1	1472.2	10206.8	1472.2	10213.5	1472.1	10223.8
GR	1472.1	10279.2	1471.9	10290.2	1471.5	10300.7	1471.3	10311.4	1471.4	10321.1
GR	1471.8	10383.0	1472.3	10397.0	1472.4	10415.8	1472.6	10451.7	1472.4	10493.7
GR	1472.9	10566.6	1472.7	10569.2	1471.5	10577.2	1471.3	10611.6	1471.8	10618.4
GR	1472.8	10627.1	1473.3	10631.1	1472.9	10635.5	1473.1	10642.2	1473.1	10645.7
GR	1472.6	10654.1	1472.6	10666.4	1472.3	10681.9	1472.3	10694.6	1472.2	10706.4
GR	1472.0	10836.5	1472.3	10844.3	1471.8	10848.1	1471.4	10852.6	1472.6	10856.7
GR	1472.3	10909.7	1472.0	10921.2	1471.9	10931.7	1471.7	10944.2	1471.8	10956.2
GR	1471.5	11045.0	1471.4	11060.2	1471.4	11074.0	1471.5	11094.2	1471.3	11110.3
GR	1471.5	11526.8	1471.7	11554.3	1471.8	11581.3	1472.3	11617.1	1473.1	11645.2

ET		7.1	9.1				9430.7	11186.7	9562.9	10072

ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
ON RIGHT SIDE FROM SEC. .2652 TO .8664.

X1	.2652	95	9562.9	9588.3	750	640	740			
GR	1478.4	9430.7	1478.3	9503.7	1478.2	9515.1	1478.1	9529.1	1478.0	9543.9
GR	1477.5	9555.3	1477.4	9562.9	1476.5	9573.8	1476.8	9580.9	1477.1	9588.3
GR	1477.2	9599.5	1477.6	9611.6	1477.9	9627.4	1478.0	9644.8	1478.0	9662.3
GR	1477.9	9782.2	1477.9	9803.7	1478.1	9823.1	1478.3	9843.7	1478.4	9867.1

GR	1478.4	9887.1	1478.2	9899.1	1477.6	9909.1	1477.9	9917.0	1478.3	9925.3
GR	1478.3	9939.0	1478.1	9961.7	1477.7	9980.4	1477.5	9999.8	1477.5	10000.0
GR	1477.2	10000.1	1477.4	10016.5	1477.0	10024.4	1477.1	10032.8	1477.4	10049.4
GR	1477.1	10226.6	1477.1	10242.7	1477.1	10254.5	1476.9	10269.5	1477.0	10282.2
GR	1477.1	10296.0	1477.3	10304.1	1477.4	10312.9	1477.5	10324.4	1478.0	10346.5
GR	1478.0	10468.2	1476.8	10499.5	1476.8	10512.9	1477.4	10526.2	1478.1	10539.3
GR	1478.0	10615.3	1477.1	10629.7	1477.1	10645.4	1477.2	10660.5	1477.2	10678.2

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GR	1477.4	10691.8	1477.6	10704.5	1477.5	10711.6	1476.5	10722.7	1477.9	10739.4
GR	1478.0	10803.4	1477.5	10826.9	1477.5	10856.6	1477.2	10896.8	1477.0	10917.9
GR	1477.0	10934.5	1477.1	10948.2	1476.8	10963.6	1476.3	10976.7	1476.0	10981.8
GR	1476.0	10986.1	1476.9	10995.6	1477.0	11005.2	1477.1	11018.2	1477.1	11029.4
GR	1478.0	11100.0	1478.0	11152.6	1478.1	11170.3	1478.3	11186.7	1478.0	11420.0
GR	1476.4	11458.7	1476.5	11498.3	1477.4	11506.2	1478.2	11513.2	1478.2	11520.4
GR	1478.2	11533.8	1477.7	11545.0	1477.7	11563.5	1477.7	11580.9	1477.6	11602.8
GR	1477.9	11732.9	1478.2	11756.1	1478.4	11780.5	1478.7	11802.5	1478.8	11808.2
ET		7.1	9.1				9700.7	10782.9	9922.2	10300
X1	.4184	95	9922.2	9940.8	650	670	680			
GR	1484.7	9700.7	1483.7	9737.4	1483.5	9747.4	1483.5	9757.7	1483.8	9767.0
GR	1484.1	9813.1	1484.1	9828.5	1484.0	9842.3	1484.0	9860.2	1483.9	9876.3
GR	1483.4	9887.6	1483.8	9895.2	1483.5	9903.4	1482.5	9909.1	1483.5	9914.5
GR	1483.5	9922.2	1483.0	9928.7	1482.5	9935.9	1483.7	9940.8	1483.8	9951.1
GR	1484.1	9962.6	1484.2	9972.8	1484.6	9987.0	1484.7	10000.0	1484.0	10000.1
GR	1484.0	10000.2	1483.7	10008.8	1482.9	10012.0	1484.2	10017.2	1484.3	10024.7
GR	1484.3	10092.4	1484.8	10104.7	1484.7	10117.6	1484.4	10131.9	1484.4	10146.7
GR	1484.3	10207.5	1483.6	10218.9	1483.2	10228.4	1483.6	10237.8	1483.7	10250.4
GR	1483.9	10266.5	1484.3	10286.8	1484.4	10304.5	1484.7	10324.5	1484.9	10341.3
GR	1484.0	10440.2	1483.5	10456.2	1483.4	10471.9	1483.3	10489.4	1482.7	10504.7
GR	1482.6	10518.5	1483.0	10535.3	1483.1	10550.7	1483.4	10566.0	1483.6	10584.1
GR	1483.4	10680.5	1483.7	10702.2	1484.0	10726.2	1484.5	10742.6	1485.0	10757.5
GR	1485.0	10769.6	1485.1	10782.9	1484.6	10797.3	1484.4	10812.0	1484.3	10825.9
GR	1484.2	11019.2	1484.2	11031.5	1484.1	11048.7	1484.0	11066.0	1484.1	11077.5
GR	1484.0	11131.7	1482.9	11150.2	1483.1	11156.1	1482.9	11167.9	1482.9	11180.3
GR	1482.8	11192.5	1482.7	11204.4	1482.8	11217.9	1483.0	11232.9	1483.0	11245.8
GR	1482.9	11263.9	1482.9	11280.5	1482.9	11297.0	1482.9	11317.1	1483.0	11341.6
GR	1483.1	11363.9	1483.0	11384.7	1483.3	11401.3	1484.0	11429.9	1484.0	11458.7
GR	1484.0	11680	1485.1	11868.6	1484.0	11875.0	1484.6	11881.6	1484.7	11890.8
ET		7.1	9.1				9748.4	10688.8	10047.3	10314
X1	.5180	95	10047.3	10077.9	550	550	560			
GR	1490.1	9748.4	1489.9	9763.8	1489.8	9777.9	1489.7	9792.3	1489.4	9800.7
GR	1488.6	9854.7	1488.5	9860.0	1488.7	9867.4	1488.4	9878.1	1487.8	9884.1
GR	1488.4	9889.4	1488.6	9895.7	1488.7	9903.5	1488.4	9908.9	1488.7	9914.7
GR	1489.0	9923.4	1488.9	9930.2	1488.2	9935.3	1487.7	9940.4	1489.4	9947.4
GR	1489.5	9954.8	1489.5	9965.4	1489.2	9975.4	1488.8	9984.2	1488.9	9994.6
GR	1488.5	10023.9	1488.5	10030.5	1488.9	10038.3	1488.6	10047.3	1488.1	10054.8
GR	1488.4	10063.2	1487.3	10072.7	1488.3	10077.9	1488.3	10084.3	1488.3	10090.1
GR	1488.5	10102.3	1488.8	10112.1	1488.5	10122.7	1488.0	10129.2	1488.5	10137.8
GR	1488.8	10150.7	1489.0	10164.0	1489.1	10180.4	1489.0	10196.7	1488.9	10213.2
GR	1488.2	10314.6	1487.8	10328.4	1487.4	10339.3	1487.4	10351.5	1487.9	10364.7
GR	1488.4	10377.5	1488.4	10447.5	1488.8	10483.9	1488.8	10500.7	1489.0	10519.1
GR	1489.3	10609.1	1489.4	10623.0	1489.4	10648.0	1489.8	10672.4	1490.1	10688.8
GR	1489.6	10703.5	1489.3	10718.4	1489.2	10735.8	1489.1	10753.1	1489.0	10771.7
GR	1489.0	10925.5	1489.0	10939.1	1488.9	10956.6	1488.5	10968.8	1488.2	10976.2
GR	1488.7	11145.5	1488.2	11156.9	1488.7	11170.9	1488.5	11174.2	1487.9	11190.7
GR	1487.8	11332.3	1487.8	11340.0	1487.9	11346.8	1487.6	11359.0	1487.2	11369.4
GR	1487.8	11377.6	1488.3	11387.0	1488.1	11396.6	1488.1	11410.2	1487.7	11419.3
GR	1487.3	11426.1	1487.6	11432.3	1487.7	11444.4	1487.9	11458.5	1487.5	11470.4
GR	1487.2	11540.7	1487.7	11549.1	1487.9	11563.0	1488.0	11573.3	1490	11610

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ET              7.1       9.1                                   9400     10488.4      9893      10138
X1    .6422      95    9893.0    9910.1       670       600      660
GR   1497.8    9400    1496.3    9494.5    1495.8    9513.3   1495.2    9525.4    1494.4    9538.8
GR   1494.6    9552.7  1494.5    9563.6    1494.3    9573.6   1494.7    9586.0    1494.5    9597.9
GR   1493.8    9602.7  1494.4    9608.3    1494.6    9619.5   1494.5    9636.6    1494.3    9656.4
GR   1494.1    9778.1  1494.1    9807.9    1493.3    9837.4   1493.0    9854.8    1492.9    9873.7
GR   1493.3    9881.8  1493.4    9893.0    1492.2    9901.0   1491.1    9905.5    1493.2    9910.1
GR   1494.2    9915.7  1493.7    9922.4    1492.8    9930.1   1493.0    9937.0    1493.4    9950.2
GR   1493.8    9974.4  1494.2   10000.0    1493.9   10000.1   1493.9   10000.2    1494.4   10022.5
GR   1494.4   10041.5  1494.4   10062.1    1494.4   10079.3   1494.2   10094.9    1493.8   10110.7
GR   1493.6   10182.8  1493.7   10191.9    1493.9   10199.4   1493.6   10207.4    1493.6   10215.9
GR   1493.9   10269.8  1494.1   10279.3    1494.1   10289.0   1494.3   10300.2    1494.2   10314.0
GR   1494.4   10469.5  1494.8   10480.6    1494.9   10488.4   1494.6   10499.2    1494.5   10512.3
GR   1494.5   10663.4  1494.2   10668.9    1494.3   10674.6   1494.3   10678.6    1493.9   10685.4
GR   1493.9   10693.0  1494.0   10702.4    1493.9   10711.4   1493.9   10719.9    1494.1   10727.2
GR   1494.0   10773.7  1493.4   10781.7    1493.5   10788.5   1493.4   10794.7    1493.1   10800.6
GR   1493.6   10843.0  1493.8   10850.1    1493.9   10859.0   1493.7   10869.3    1493.3   10879.0
GR   1493.2   10891.3  1493.1   10902.5    1492.9   10913.3   1492.9   10918.5    1493.1   10924.4
GR   1493.0   10928.8  1492.6   10935.3    1492.6   10941.0   1491.8   10949.3    1492.0   10952.4
GR   1494.2   11008.0  1494.7   11016.6    1494.6   11025.6   1494.3   11035.3    1494.1   11045.4
GR   1492.5    11150   1492.5   11297.0    1493.2   11308.0   1493.2   11321.5    1494.9   11391.4

QT       2      2397      2397
ET              7.1       9.1                                   9276.7     10226.3      9888      10090.2
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
        ON LEFT SIDE FROM SEC. .7746 TO 1.2632.
X1    .7746      95   10063.0   10090.2       730       700      780
GR   1502.0    9000.0  1500.3    9086.8    1500.1    9103.9   1499.8    9119.6    1500.4    9133.0
GR   1500.0    9225.6  1500.0    9232.8    1500.1    9240.9   1499.9    9248.2    1499.4    9254.7
GR   1500.2    9262.9  1500.7    9276.7    1500.2    9291.7   1500.2    9314.8    1500.3    9338.7
GR   1499.8    9355.5  1498.4    9367.1    1497.7    9374.7   1499.4    9385.1    1500.2    9397.5
GR   1500.3    9566.0  1498.2    9571.5    1499.7    9577.3   1499.9    9589.3    1499.9    9601.1
GR   1500.1    9613.1  1500.1    9624.2    1500.0    9634.8   1500.1    9652.2    1500.0    9669.4
GR   1499.8    9688.1  1499.5    9706.0    1499.6    9722.0   1499.6    9741.7    1499.3    9762.7
GR   1499.3    9868.4  1499.1    9885.0    1499.2    9909.0   1499.1    9934.8    1498.4    9948.6
GR   1499.3    9955.8  1499.4    9974.4    1499.3    9990.1   1498.9    9999.4    1498.9   10000.0
GR   1498.6   10000.1  1499.2   10012.7    1499.2   10022.8   1499.3   10036.1    1499.4   10049.1
GR   1498.0   10063.0  1497.4   10073.4    1497.7   10080.2   1499.1   10090.2    1500.2   10102.0
GR   1500.6   10226.3  1500.1   10247.8    1500.2   10263.3   1499.8   10279.6    1500.0   10298.5
GR   1500.3   10343.2  1500.6   10372.9    1500.3   10381.7   1500.3   10389.3    1500.3   10397.6
GR   1500.2   10527.4  1500.4   10535.2    1500.4   10543.8   1500.4   10551.7    1500.5   10558.2
GR   1500.5   10567.1  1500.6   10573.4    1500.8   10581.6   1501.0   10589.5    1500.6   10596.1
GR   1500.3   10727.5  1499.8   10735.3    1500.1   10741.6   1500.1   10746.9    1499.7   10755.7
GR   1499.4   10764.5  1499.4   10774.0    1499.1   10783.6   1498.7   10792.3    1498.6   10799.8
GR   1498.6   10900.0  1498.9   10950.0    1498.4   11095.8   1498.4   11105.9    1498.4   11112.3
GR   1500.1   11151.4  1500.8   11178.5    1501.6   11184.4   1501.8   11193.7    1501.9   11201.7

ET              7.1       9.1                                   9222.7     10221.4      9836.2    10069.5
X1    .8664      95   10025.5   10069.5       490       500      500
GR   1506.1    8965.8  1505.8    8978.8    1505.6    8994.4   1505.1    9008.1    1503.8    9019.7
GR   1503.9    9029.0  1504.0    9034.8    1504.2    9042.2   1504.3    9055.6    1504.2    9069.4
GR   1504.5    9083.2  1504.4    9094.6    1503.9    9107.0   1501.4    9117.0    1504.2    9123.3
GR   1504.3    9130.1  1504.1    9141.8    1503.5    9152.4   1504.2    9159.1    1504.2    9171.5
1
   06MAY93      11:47:04                                                                      PAGE    5

GR   1503.9    9183.9  1503.9    9194.0    1504.6    9222.7   1503.9    9250.4    1503.7    9279.1
GR   1503.7    9310.9  1503.1    9338.3    1503.0    9347.2   1503.1    9359.6    1503.2    9380.1
GR   1503.4    9401.8  1503.8    9441.5    1503.6    9472.9   1503.3    9501.4    1503.3    9530.7
GR   1504.0    9550.0  1503.8    9780.9    1503.9    9801.2   1504.0    9821.6    1504.1    9841.3
GR   1504.0    9858.9  1503.8    9883.4    1503.5    9899.9   1503.3    9915.1    1502.9    9925.8
GR   1502.9    9934.3  1503.4    9943.3    1503.4    9953.9   1503.1    9961.6    1503.2    9972.6
GR   1503.3    9984.2  1503.7    9996.9    1503.7   10000.0   1503.8   10000.1    1503.8   10010.7
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GR	1503.8	10025.5	1503.3	10038.8	1502.9	10050.6	1502.8	10059.9	1503.7	10069.5
GR	1503.4	10077.9	1502.4	10085.7	1503.5	10092.9	1503.8	10100.5	1503.6	10115.1
GR	1503.9	10130.3	1504.3	10147.6	1504.5	10165.2	1504.2	10183.7	1504.5	10196.1
GR	1505.2	10208.7	1505.8	10221.4	1505.6	10235.6	1505.1	10254.2	1504.7	10272.2
GR	1504.2	10386.2	1504.1	10406.9	1503.9	10428.3	1503.8	10446.3	1503.4	10463.7
GR	1503.6	10509.1	1503.7	10516.0	1503.7	10523.1	1503.3	10529.7	1503.4	10537.1
GR	1503.7	10639.9	1503.7	10644.6	1503.9	10649.9	1504.0	10655.2	1503.7	10661.5
GR	1504.0	10669.1	1504.1	10677.6	1504.3	10686.8	1504.5	10695.5	1504.8	10704.8
ET		7.1	9.1				9184.0	10587.9	9800	10187.3
X1	.9205	95	10087.7	10187.3	290	350	325			
GR	1508.8	8728.9	1508.6	8745.6	1508.9	8764.8	1508.6	8783.9	1508.6	8802.7
GR	1508.4	8821.6	1508.0	8844.4	1507.9	8866.4	1507.9	8887.0	1507.6	8907.4
GR	1507.1	8924.6	1506.8	8938.3	1506.7	8952.2	1506.2	8959.8	1506.6	8976.1
GR	1506.6	8991.2	1506.3	9006.1	1506.0	9021.1	1505.0	9031.7	1504.6	9038.0
GR	1506.0	9044.1	1506.4	9054.9	1506.6	9066.8	1505.7	9079.1	1505.3	9086.7
GR	1506.1	9095.2	1506.8	9114.1	1507.0	9136.1	1507.0	9161.1	1507.1	9184.0
GR	1506.8	9204.1	1506.6	9225.1	1506.6	9251.7	1506.6	9276.4	1506.5	9296.9
GR	1506.1	9316.8	1505.6	9331.4	1505.0	9345.0	1504.3	9349.3	1505.4	9355.1
GR	1506.0	9364.0	1506.2	9379.1	1506.3	9391.0	1506.1	9407.0	1506.1	9426.9
GR	1506.3	9444.5	1505.9	9464.0	1505.9	9482.4	1505.9	9501.0	1505.7	9519.7
GR	1506.5	9661.4	1506.5	9694.8	1506.6	9731.8	1506.4	9770.7	1506.4	9815.1
GR	1506.5	9890.7	1505.9	9938.4	1506.0	9954.5	1506.0	9964.9	1505.9	9978.3
GR	1505.9	9991.9	1505.9	10000.0	1505.7	10000.1	1506.0	10015.2	1506.2	10028.3
GR	1506.1	10041.9	1505.8	10053.8	1505.7	10068.8	1505.7	10078.7	1505.5	10087.7
GR	1505.5	10104.4	1505.7	10119.5	1505.7	10138.7	1505.4	10162.0	1505.3	10172.2
GR	1506.0	10187.3	1507.3	10201.5	1508.1	10214.9	1508.5	10230.6	1508.7	10243.0
GR	1508.7	10261.3	1508.6	10284.0	1508.6	10299.3	1508.7	10328.9	1508.9	10356.5
GR	1509.2	10389.2	1509.5	10418.3	1509.5	10450.0	1509.3	10479.1	1509.4	10496.4
GR	1509.4	10515.6	1509.3	10535.8	1509.5	10555.1	1509.8	10571.0	1510.0	10587.9
ET		7.1	9.1				9279.9	10641.5	9981	10276.8
X1	.9981	95	9981.0	10017.7	425	425	470			
GR	1512.1	8940.8	1511.8	8952.2	1511.2	8961.6	1510.9	8969.4	1510.7	8979.1
GR	1510.6	8987.1	1509.9	8994.8	1507.9	9004.5	1508.3	9008.8	1510.0	9011.6
GR	1509.7	9016.9	1509.6	9023.3	1510.4	9030.6	1511.6	9042.4	1512.2	9050.1
GR	1512.3	9063.1	1512.7	9074.8	1512.5	9081.2	1512.0	9090.7	1512.2	9102.4
GR	1512.1	9219.1	1511.9	9231.5	1511.4	9251.4	1510.7	9269.9	1510.2	9273.5
GR	1511.4	9279.9	1510.9	9286.4	1511.0	9294.1	1511.0	9304.6	1510.5	9315.0
GR	1509.8	9323.1	1510.4	9327.8	1510.8	9334.3	1510.7	9347.4	1510.8	9363.5
GR	1510.7	9760.6	1511.0	9776.9	1511.2	9796.9	1511.3	9814.7	1511.1	9824.3
GR	1510.9	9831.6	1511.3	9837.4	1510.9	9845.5	1510.3	9859.1	1510.8	9865.7
GR	1510.6	9981.0	1509.8	9990.0	1509.2	9996.9	1509.1	10000.0	1508.7	10000.1
GR	1509.0	10004.4	1509.9	10008.3	1510.0	10017.7	1510.0	10032.9	1509.6	10046.0
GR	1509.6	10055.7	1509.5	10065.0	1509.5	10074.0	1509.7	10085.7	1509.7	10101.1
GR	1509.7	10116.9	1509.4	10127.9	1509.3	10141.2	1509.4	10147.1	1509.6	10158.5
GR	1510.0	10173.5	1510.1	10186.4	1510.0	10202.9	1509.8	10217.1	1509.0	10229.6

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GR	1508.7	10240.8	1508.8	10251.2	1509.0	10263.1	1508.3	10267.9	1508.1	10271.2
GR	1509.0	10276.8	1509.1	10289.2	1509.2	10303.2	1509.1	10312.8	1508.5	10323.9
GR	1509.0	10329.2	1509.2	10335.6	1509.1	10344.9	1509.5	10354.0	1509.6	10365.1
GR	1509.6	10376.4	1509.9	10391.3	1510.4	10408.3	1510.7	10426.1	1510.6	10446.1
GR	1510.8	10569.2	1511.2	10588.5	1511.3	10604.8	1511.5	10623.1	1511.9	10641.5
ØT	2	1905	1905							
ET		7.1	9.1				9694.3	10197.0	9975	10120
X1	1.1098	93	9983.0	10006.0	600	600	600			
GR	1518.2	9343.8	1518.0	9365.7	1518.0	9386.5	1517.8	9406.3	1517.7	9428.8
GR	1517.7	9532.1	1517.6	9542.6	1517.9	9556.2	1517.8	9567.9	1518.0	9581.9
GR	1518.3	9694.3	1518.1	9714.9	1518.1	9731.1	1518.0	9752.6	1518.0	9776.9
GR	1517.8	9815.5	1517.7	9860.9	1517.8	9895.9	1517.6	9905.2	1517.2	9912.1
GR	1517.7	9917.2	1517.8	9930.7	1517.3	9935.0	1517.6	9944.3	1518.0	9949.4
GR	1517.5	9956.4	1517.4	9967.8	1516.4	9972.7	1515.8	9983.0	1513.3	9990.8

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GR    1513.3     9994.8     1513.2    10000.0     1514.2    10001.1     1516.6    10006.0     1517.1    10008.2
GR    1517.3    10013.2     1517.5    10022.6     1517.5    10032.4     1517.7    10040.8     1517.4    10051.7
GR    1517.2    10064.4     1517.2    10073.2     1517.2    10087.3     1517.1    10103.8     1516.7    10120.2
GR    1516.1    10130.6     1515.9    10139.3     1515.8    10146.2     1515.9    10152.5     1516.2    10162.9
GR    1516.2    10172.8     1516.4    10178.3     1517.2    10188.7     1518.2    10197.0     1517.9    10205.0
GR    1516.6    10271.5     1516.4    10283.9     1516.3    10293.5     1516.5    10307.1     1516.0    10324.6
GR    1514.0    10413.6     1514.0    10424.0     1513.2    10431.0     1513.3    10435.2     1514.6    10440.8
GR    1514.5    10445.7     1514.1    10453.6     1514.2    10462.0     1514.4    10473.1     1514.4    10486.3
GR    1514.3    10497.6     1514.0    10502.6     1514.0    10507.8     1514.3    10515.4     1514.0    10527.0
GR    1514.0    10531.3     1514.3    10536.7     1514.4    10542.9     1514.0    10547.8     1514.0    10554.1
GR    1514.3    10560.1     1514.2    10570.7     1514.3    10579.8     1514.8    10593.9     1515.1    10607.3
GR    1515.2    10624.1     1515.7    10640.0     1516.3    10659.4     1516.5    10678.3     1517.2    10703.2
GR    1517.8    10727.0     1517.7    10748.0     1518.2    10748.1

ET                  7.1        9.1                                     9811.3    10315.8     9975.6     10115
X1    1.2045        86     9975.6    10023.1         500       500        500
GR    1524.5     9361.3     1524.4     9382.8     1524.0     9410.7     1524.1     9427.7     1524.4     9451.5
GR    1524.2     9801.9     1524.4     9811.3     1524.1     9827.4     1524.0     9844.8     1524.0     9866.8
GR    1523.9     9887.8     1523.5     9903.4     1523.3     9917.5     1523.1     9924.1     1523.4     9934.2
GR    1523.0     9942.3     1522.5     9952.5     1522.4     9958.2     1522.2     9965.5     1522.0     9975.6
GR    1521.0     9985.6     1518.2     9996.8     1518.2    10000.0     1518.7    10000.1     1519.4    10005.8
GR    1520.0    10012.8     1522.1    10023.1     1522.4    10032.3     1522.5    10049.4     1522.6    10086.3
GR    1521.8    10099.2     1522.0    10105.7     1521.7    10109.8     1521.7    10115.1     1522.2    10123.8
GR    1522.1    10137.0     1522.4    10153.2     1522.4    10167.4     1522.1    10179.5     1522.0    10193.8
GR    1521.8    10198.9     1521.8    10205.2     1522.0    10212.1     1522.1    10225.1     1522.6    10242.8
GR    1522.7    10258.5     1523.4    10271.0     1523.8    10283.9     1524.0    10300.8     1524.5    10315.8
GR    1521.1    10584.6     1521.4    10597.0     1521.7    10612.8     1521.9    10629.5     1521.1    10640.7
GR    1519.8    10652.4     1518.0    10663.2     1518.1    10669.0     1518.0    10678.7     1518.2    10691.4
GR    1518.1    10699.0     1518.2    10706.7     1518.4    10717.1     1518.6    10729.3     1517.8    10737.7
GR    1517.8    10748.2     1518.4    10758.0     1518.7    10768.9     1518.8    10780.5     1518.7    10792.0
GR    1518.3    10801.5     1518.1    10811.3     1518.6    10818.8     1518.7    10830.9     1518.6    10847.4
GR    1518.5    10862.2     1518.4    10879.1     1518.5    10894.2     1518.7    10908.5     1519.0    10924.3
GR    1519.3    10946.3     1519.0    10964.7     1519.1    10973.6     1520.2    10985.3     1521.1    10990.1
GR      1524      11000
1
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ET                  7.1        9.1                                     9688.7    10049.4     9985.4    10049.4
X1    1.2632        64     9985.4    10005.6         315       305        305
GR    1529.4     9682.5     1530.9     9688.7     1530.7     9699.1     1530.6     9714.0     1530.3     9728.2
GR    1530.3     9741.9     1530.5     9752.5     1530.1     9764.8     1529.7     9777.2     1529.7     9788.4
GR    1529.8     9796.3     1529.6     9807.6     1529.4     9818.3     1528.7     9831.1     1528.0     9848.2
GR    1527.8     9878.3     1527.7     9898.3     1526.9     9907.5     1527.2     9910.5     1525.5     9917.2
GR    1527.3     9926.5     1527.5     9933.6     1527.5     9942.3     1526.9     9952.8     1526.4     9964.7
GR    1526.0     9976.9     1524.9     9985.4     1522.7     9993.9     1522.1     9997.5     1522.7    10000.0
GR    1522.6    10000.1     1525.8    10005.6     1525.5    10009.3     1525.7    10012.8     1526.5    10021.1
GR    1528.1    10030.7     1528.5    10049.4     1528.2    10061.0     1527.9    10073.1     1527.3    10084.8
GR    1526.6    10095.9     1526.4    10108.2     1526.3    10121.8     1526.0    10136.6     1525.8    10149.7
GR    1525.4    10164.2     1525.2    10177.4     1525.2    10193.0     1525.3    10210.1     1525.3    10227.6
GR    1525.3    10241.4     1525.1    10255.4     1525.1    10268.7     1525.1    10290.3     1525.3    10314.2
GR    1525.6    10344.5     1525.8    10366.1     1526.1    10388.1     1526.3    10408.4     1526.2    10427.4
GR    1526.4    10437.8     1526.6    10441.2       1528     10555       1530     10570

ET                  7.1        9.1                                       9923     10077      9950     10055
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE 4:1
        ANGLE FROM CULVERT OUTLET.
        FLOODPLAIN DELINETIONS ARE PLOTTED BASED ON WSEL AS PONDED FLOW OUTSIDE
        EFFECTIVE FLOW LIMITS IS POSSIBLE AT THIS SECTION.
X1    1.3314        40    10038.2    10050.7         365       365        365
GR    1533.0     9787.3     1533.2     9799.9     1532.7     9814.6     1532.7     9825.6     1532.4     9838.5
GR    1532.2     9849.1     1531.9     9859.0     1531.5     9867.5     1531.1     9873.8     1531.2     9880.8
GR    1531.5     9891.0     1531.8     9902.6     1531.8     9913.7     1531.5     9927.6     1530.9     9936.2
GR    1531.4     9946.7     1531.3     9965.4     1530.8     9981.3     1530.4     9991.2     1530.4     9998.3
GR    1530.3    10000.0     1530.3    10000.1     1529.7    10006.3     1529.8    10013.2     1529.8    10022.1
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GR   1529.6    10030.1     1527.2    10038.2     1525.1    10043.4     1525.9    10046.9     1529.3    10050.7
GR   1529.8    10057.6     1530.7    10064.1     1531.3    10071.2     1531.7    10079.6     1531.9    10088.7
GR   1532.2    10097.9     1532.2    10106.6     1532.5    10116.8     1532.7    10126.7     1532.7    10126.8

NC     .035       .035       .035        .3         .5
        BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 4' RCBS  - STRUC. NO. 27)
X1    1.361          4     9961.5    10038.5        155        155        155
X3       10                                                             1533.0     1533.0
GR   1534.0     9961.5     1528.5     9961.5     1528.5    10038.5     1534.0    10038.5

NC     .012       .012       .012
SC    6.012         .2        2.7          0          4         12        137       12.1       1529     1528.5
        END CULVERTS (STRUC. #27)
X1    1.387          0          0          0        137        137        137                   .5
X2                             2       1533     1535.0
X3       10                                                             1537.5     1537.5
BT       10       9900     1539.5                10000     1538.8                10040.9     1538.5
BT    10041     1538.0                10081     1537.2                   10089     1536.8                 10112
BT   1536.0                10113       1535                10250       1535                 10263      1538
BT        0
1
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NC     .035       .035       .035
ET                  7.1        9.1                                       9900      10048       9900      10048
        ENCRAOCHMENT (ET CARD) APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE 1:1
        FLARE ANGLE FROM CULVERT INLET ON LEFT SIDE (LOOKING DOWNSTREAM) AND
        INEFFECTIVE FLOW OUTSIDE OF ARMORED WEIR LEVEE ON RIGHT SIDE
        FLOODPLAIN AND FLOODWAY DELINEATIONS ARE PLOTTED BASED ON WATER SURF-
        ACE ELEV. AS WATER WILL STILL POND BEYOND EFFECTIVE FLOW LIMITS AND
        FOR FLOODWAY PURPOSES THE PONDED AREAS ARE RESERVED FOR DETENTION.
X1    1.396          6       9900      10048         50         50         50
GR     1538       9587       1532       9617     1531.5       9900       1531      10000       1533      10040
GR     1535      10048

NC     .049       .049       .042         .1         .3
QT        2       2391       2391
ET                  7.1        9.1                                     9184.0    10587.9       9800    10187.3
        BEGIN TRIBUTARY A.  REPEAT CROSS-SECTION .9205
X1   -.9205         95    10087.7    10187.3        290        350        325
GR   1508.8     8728.9     1508.6     8745.6     1508.9     8764.8     1508.6     8783.9     1508.6     8802.7
GR   1508.4     8821.6     1508.0     8844.4     1507.9     8866.4     1507.9     8887.0     1507.6     8907.4
GR   1507.1     8924.6     1506.8     8938.3     1506.7     8952.2     1506.2     8959.8     1506.6     8976.1
GR   1506.6     8991.2     1506.3     9006.1     1506.0     9021.1     1505.0     9031.7     1504.6     9038.0
GR   1506.0     9044.1     1506.4     9054.9     1506.6     9066.8     1505.7     9079.1     1505.3     9086.7
GR   1506.1     9095.2     1506.8     9114.1     1507.0     9136.1     1507.0     9161.1     1507.1     9184.0
GR   1506.8     9204.1     1506.6     9225.1     1506.6     9251.7     1506.6     9276.4     1506.5     9296.9
GR   1506.1     9316.8     1505.6     9331.4     1505.0     9345.0     1504.3     9349.3     1505.4     9355.1
GR   1506.0     9364.0     1506.2     9379.1     1506.3     9391.0     1506.1     9407.0     1506.1     9426.9
GR   1506.3     9444.5     1505.9     9464.0     1505.9     9482.4     1505.9     9501.0     1505.7     9519.7
GR   1506.5     9661.4     1506.5     9694.8     1506.6     9731.8     1506.4     9770.7     1506.4     9815.1
GR   1506.5     9890.7     1505.9     9938.4     1506.0     9954.5     1506.0     9964.9     1505.9     9978.3
GR   1505.9     9991.9     1505.9    10000.0     1505.7    10000.1     1506.0    10015.2     1506.2    10028.3
GR   1506.1    10041.9     1505.8    10053.8     1505.7    10068.8     1505.7    10078.7     1505.5    10087.7
GR   1505.5    10104.4     1505.7    10119.5     1505.7    10138.7     1505.4    10162.0     1505.3    10172.2
GR   1506.0    10187.3     1507.3    10201.5     1508.1    10214.9     1508.5    10230.6     1508.7    10243.0
GR   1508.7    10261.3     1508.6    10284.0     1508.6    10299.3     1508.7    10328.9     1508.9    10356.5
GR   1509.2    10389.2     1509.5    10418.3     1509.5    10450.0     1509.3    10479.1     1509.4    10496.4
GR   1509.4    10515.6     1509.3    10535.8     1509.5    10555.1     1509.8    10571.0     1510.0    10587.9

ET                  7.1        9.1                                     9279.9    10641.5       9981    10276.8
        ADD 10 TO TRIB. 5A CROSS-SECTION I.D. NUMBERS. STA. 10280= BASELINE 5A.
X1   11.007         95    10251.2    10276.8        430        425        460
GR   1512.1     8940.8     1511.8     8952.2     1511.2     8961.6     1510.9     8969.4     1510.7     8979.1
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GR   1510.6    8987.1    1509.9    8994.8    1507.9    9004.5    1508.3    9008.8    1510.0    9011.6
GR   1509.7    9016.9    1509.6    9023.3    1510.4    9030.6    1511.6    9042.4    1512.2    9050.1
GR   1512.3    9063.1    1512.7    9074.8    1512.5    9081.2    1512.0    9090.7    1512.2    9102.4
GR   1512.1    9219.1    1511.9    9231.5    1511.4    9251.4    1510.7    9269.9    1510.2    9273.5
GR   1511.4    9279.9    1510.9    9286.4    1511.0    9294.1    1511.0    9304.6    1510.5    9315.0
GR   1509.8    9323.1    1510.4    9327.8    1510.8    9334.3    1510.7    9347.4    1510.8    9363.5
GR   1510.7    9760.6    1511.0    9776.9    1511.2    9796.9    1511.3    9814.7    1511.1    9824.3
GR   1510.9    9831.6    1511.3    9837.4    1510.9    9845.5    1510.3    9859.1    1510.8    9865.7
GR   1510.6    9981.0    1509.8    9990.0    1509.2    9996.9    1509.1   10000.0    1508.7   10000.1
GR   1509.0   10004.4    1509.9   10008.3    1510.0   10017.7    1510.0   10032.9    1509.6   10046.0
GR   1509.6   10055.7    1509.5   10065.0    1509.5   10074.0    1509.7   10085.7    1509.7   10101.1
GR   1509.7   10116.9    1509.4   10127.9    1509.3   10141.2    1509.4   10147.1    1509.6   10158.5
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GR   1510.0   10173.5    1510.1   10186.4    1510.0   10202.9    1509.8   10217.1    1509.0   10229.6
GR   1508.7   10240.8    1508.8   10251.2    1509.0   10263.1    1508.3   10267.9    1508.1   10271.2
GR   1509.0   10276.8    1509.1   10289.2    1509.2   10303.2    1509.1   10312.8    1508.5   10323.9
GR   1509.0   10329.2    1509.2   10335.6    1509.1   10344.9    1509.5   10354.0    1509.6   10365.1
GR   1509.6   10376.4    1509.9   10391.3    1510.4   10408.3    1510.7   10426.1    1510.6   10446.1
GR   1510.8   10569.2    1511.2   10588.5    1511.3   10604.8    1511.5   10623.1    1511.9   10641.5

QT        2       748       748
ET                7.1       9.1                                 10197.0    10748.1      10400      10545
        STA. 10465 = BASELINE 5A.
X1   11.117        93   10413.6   10440.8       590       590       590
GR   1518.1    9343.8    1518.0    9365.7    1518.0    9386.5    1517.8    9406.3    1517.7    9428.8
GR   1517.7    9532.1    1517.6    9542.6    1517.9    9556.2    1517.8    9567.9    1518.0    9581.9
GR   1518.2    9694.3    1518.1    9714.9    1518.1    9731.1    1518.2    9752.6    1518.1    9776.9
GR   1517.8    9815.5    1517.7    9860.9    1517.8    9895.9    1517.6    9905.2    1517.2    9912.1
GR   1517.7    9917.2    1517.8    9930.7    1517.3    9935.0    1517.6    9944.3    1518.0    9949.4
GR   1517.5    9956.4    1517.4    9967.8    1517.4    9972.7    1515.8    9983.0    1513.3    9990.8
GR   1513.3    9994.8    1513.2   10000.0    1514.2   10000.1    1515.6   10005.0    1517.1   10008.2
GR   1517.3   10013.2    1517.5   10022.6    1517.5   10032.4    1517.7   10040.8    1517.4   10051.7
GR   1517.2   10064.4    1517.2   10073.2    1517.2   10087.3    1517.1   10103.8    1516.7   10120.2
GR   1516.1   10130.6    1515.9   10139.3    1515.8   10146.2    1515.9   10152.5    1516.2   10162.9
GR   1516.2   10172.8    1516.4   10178.3    1517.2   10188.7    1518.0   10197.0    1517.9   10205.0
GR   1516.6   10271.5    1516.4   10283.9    1516.3   10293.5    1516.5   10307.1    1516.0   10324.6
GR   1514.0   10413.6    1514.0   10424.0    1513.2   10431.0    1513.3   10435.2    1514.6   10440.8
GR   1514.5   10445.7    1514.1   10453.6    1514.2   10462.0    1514.4   10473.1    1514.4   10486.3
GR   1514.3   10497.6    1514.0   10502.6    1514.0   10507.8    1514.3   10515.4    1514.0   10527.0
GR   1514.0   10531.3    1514.3   10536.7    1514.4   10542.9    1514.0   10547.8    1514.0   10554.1
GR   1514.3   10560.1    1514.2   10570.7    1514.3   10579.8    1514.8   10593.9    1515.1   10607.3
GR   1515.2   10624.1    1515.7   10640.0    1516.3   10659.4    1516.5   10678.3    1517.2   10703.2
GR   1517.8   10727.0    1517.7   10748.0    1518.1   10748.1

ET                7.1       9.1                                   10640      10810      10700      10800
        STA. 10725 = BASELINE 5A.
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1
        FLARE ANGLE OF CULVERT OUTLET.
        FLOODPLAIN DELINEATION BEYOND EFFECTIVE LIMITS BASED ON WSEL AS PONDING
        IS POSSIBLE AT THIS SECTION.
X1   11.210        86   10729.3   10758.0       490       465       520
GR   1524.5    9361.3    1524.4    9382.8    1524.0    9410.7    1524.1    9427.7    1524.4    9451.5
GR   1524.2    9801.9    1524.4    9811.3    1524.3    9827.4    1524.3    9844.8    1524.2    9866.8
GR   1524.1    9887.8    1523.9    9903.4    1523.3    9917.5    1523.1    9924.1    1523.4    9934.2
GR   1523.5    9942.3    1523.2    9952.5    1523.6    9958.2    1523.7    9965.5    1521.1    9975.6
GR   1521.8    9985.6    1517.8    9996.8    1518.2   10000.0    1518.7   10000.1    1519.4   10005.8
GR   1521.0   10012.8    1523.1   10023.1    1523.4   10032.3    1523.4   10049.4    1523.5   10086.3
GR   1521.8   10099.2    1522.0   10105.7    1521.7   10109.8    1521.7   10115.1    1522.2   10123.8
GR   1522.5   10137.0    1522.4   10153.2    1522.4   10167.4    1522.4   10179.5    1522.0   10193.8
GR   1521.6   10198.9    1521.7   10205.2    1522.2   10212.1    1522.5   10225.1    1522.6   10242.8
GR   1522.7   10258.5    1523.4   10271.0    1523.8   10283.9    1524.0   10300.8    1524.2   10315.8
GR   1521.1   10584.6    1521.4   10597.0    1521.7   10612.8    1521.9   10629.5    1521.1   10640.7
GR   1519.8   10652.4    1518.0   10663.2    1518.1   10669.0    1518.0   10678.7    1518.2   10691.4
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GR   1518.1    10699.0     1518.2    10706.7     1518.4    10717.1     1518.6    10729.3     1517.8    10737.7
GR   1517.8    10748.2     1518.4    10758.0     1518.7    10768.9     1518.8    10780.5     1518.7    10792.0
GR   1518.3    10801.5     1518.1    10811.3     1518.6    10818.8     1518.7    10830.9     1518.6    10847.4
GR   1518.5    10862.2     1518.4    10879.1     1518.5    10894.2     1518.7    10908.5     1519.0    10924.3
1
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GR   1519.3    10946.3     1519.0    10964.7     1519.1    10973.6     1520.2    10985.3     1521.1    10990.1
GR     1524      11000

NC     .035       .035       .035        .3         .5
        BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 8' RCBS  - STRUC. NO. 28)
X1   11.244          4     9961.5    10038.5        185        185        185
X3      10                                                                          1527.3     1527.3
GR   1527.3     9961.5     1518.8     9961.5     1518.8    10038.5     1527.3    10038.5

NC     .012       .012       .012
SC    6.012         .2        3.0          0          6         12        159       12.3     1519.3     1518.8
        END CULVERTS (STRUC. #28)
X1   11.274          0          0          0        159        159        159                   .5
X2                                2     1527.3     1526.8
X3      10                                                                          1526       1526
BT       9       9900     1531.7                  10000     1530.9               10190.9     1529.5
BT   10191     1529.0                 10231     1528.2                 10239     1527.8                 10243
BT   1526.8                 10251      1527                 10272     1527.5

NC     .035       .040       .035
ET                  7.1        9.1                                       9912      10088       9912      10088
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 1:1
        FLARE ANGLE OF CULVERT INLET.
        FLOODPLAIN\FLOODWAY DELINEATION PLOTTRD BASED ON WSEL AS PONDING AND
        POSSIBLE AT THIS SEC. BEYOND EFFECTIVE FLOW LIMITS.
X1   11.283          8       9944     10090         50         50         50
GR     1526       9912       1522      9944       1521       9956     1520.8      10000       1521      10043
GR     1523      10090       1524     10106       1526      10126
1
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


*PROF 1

CCHV=     .100 CEHV=     .300
*SECNO  .059

3265 DIVIDED FLOW

        FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
        ANALYSIS BY EQUAL CONVEYANCE REDUCTION METHOD (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH 5 WEST ALONG BASELINE.
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        CROZIER ROAD (219 TH AVE) CROSSES 100 FT. UPSTREAM OF THIS SECTION
        AS AN AT-GRADE CROSSING (A.K.A. DIP SECTION)
     .059       2.96    1467.86        .00    1468.00    1467.97        .11        .00        .00    1467.40
   2469.0      336.4      210.9     1921.7      199.6       37.6      846.0         .0         .0    1466.00
     .00       1.69       5.61       2.27       .049       .042       .049       .000    1464.90     9604.21
  .008105         0.         0.         0.          0          0          9        .00    1953.89    11606.90
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*SECNO  .153

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9507.4   11645.2  TYPE=      1  TARGET=     2137.800
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
       ON LEFT SIDE AT THIS SECTION.
     .153      2.03   1472.43      .00       .00   1472.54      .11      4.56      .00   1472.50
   2469.0       1.2     176.2    2291.6       2.7      47.5     889.1      12.2     21.1   1472.10
     .06       .46      3.71      2.58      .049      .042      .049      .000   1470.40   9624.29
  .009299      680.      680.      500.         5         0         0       .00   1520.05  11621.48


*SECNO  .265

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9430.7   11186.7  TYPE=      1  TARGET=     1756.000
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
1
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       ON RIGHT SIDE FROM SEC. .2652 TO .8664.
     .265      2.17   1478.17      .00       .00   1478.27      .11      5.73      .00   1477.40
   2469.0      20.8     127.9    2320.3      12.2      33.0     916.0      26.3     43.8   1477.10
     .12      1.70      3.87      2.53      .049      .042      .049      .000   1476.00   9519.82
  .008467      750.      740.      640.         5         0         0       .00   1554.52  11175.73


*SECNO  .418

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9700.7   10782.9  TYPE=      1  TARGET=     1082.200
     .418      2.13   1484.63      .00       .00   1484.81      .18      6.51      .02   1483.50
   2469.0     501.0     154.7    1813.3     170.8      30.0     548.8      39.4     63.2   1483.70
     .18      2.93      5.15      3.30      .049      .042      .049      .000   1482.50   9703.20
  .011336      650.      680.      670.         4         0         0       .00    963.36  10746.53


*SECNO  .518

3470 ENCROACHMENT STATIONS=     9748.4   10688.8  TYPE=      1  TARGET=      940.399
     .518      2.48   1489.68      .00       .00   1489.81      .14      5.00      .00   1488.60
   2469.0     561.0     203.9    1704.1     217.3      49.0     582.7      49.5     74.7   1488.30
     .23      2.58      4.16      2.92      .049      .042      .049      .000   1487.20   9793.00
  .007444      550.      560.      550.         5         0         0       .00    871.76  10664.76


*SECNO  .642

3470 ENCROACHMENT STATIONS=     9400.0   10488.4  TYPE=      1  TARGET=     1088.400
     .642      3.76   1494.86      .00       .00   1495.04      .18      5.21      .01   1493.40
   2469.0     833.9     268.9    1366.2     281.3      43.3     478.7      61.3     87.8   1493.20
     .28      2.96      6.21      2.85      .049      .042      .049      .000   1491.10   9531.16
  .009381      670.      660.      600.         6         0         0       .00    953.82  10484.98


*SECNO  .775
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3470 ENCROACHMENT STATIONS=     9276.7   10226.3  TYPE=      1  TARGET=      949.600
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
       ON LEFT SIDE FROM SEC. .7746 TO 1.2632.
      .775      3.17   1500.57       .00       .00   1500.74       .17      5.70       .00   1498.00
    2397.0    1961.8     394.0      41.2     716.2      71.9      31.3      74.8     103.5   1499.10
      .35      2.74      5.48      1.31      .049      .042      .049      .000   1497.40   9280.79
   .006596      730.      780.      700.         5         0         0       .00    934.25  10215.03
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1


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

*SECNO  .866

3470 ENCROACHMENT STATIONS=     9222.7   10221.4  TYPE=      1  TARGET=      998.700
      .866      3.12   1504.52       .00       .00   1504.66       .14      3.92       .00   1503.80
    2397.0    1938.1     239.7     219.2     674.8      57.4      76.9      84.0     114.2   1503.70
      .39      2.87      4.18      2.85      .049      .042      .049      .000   1501.40   9225.89
   .009820      490.      500.      500.         2         0         0       .00    970.56  10196.45

*SECNO  .920

3470 ENCROACHMENT STATIONS=     9184.0   10587.9  TYPE=      1  TARGET=     1403.900
      .920      2.72   1507.02       .00       .00   1507.15       .13      2.49       .00   1505.50
    2397.0    1833.4     554.2       9.4     744.4     144.5       5.7      89.8     120.9   1506.00
      .42      2.46      3.83      1.64      .049      .042      .049      .000   1504.30   9189.10
   .007152      290.      325.      350.         4         0         0       .00   1009.39  10198.48

*SECNO  .998

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS=     9279.9   10641.5  TYPE=      1  TARGET=     1361.600
      .998      2.91   1510.81       .00       .00   1511.06       .25      3.87       .04   1510.60
    2397.0      48.7     169.5    2178.8      50.1      41.4     538.7      97.4     131.7   1510.00
      .45       .97      4.09      4.04      .049      .042      .049      .000   1507.90   9308.70
   .011577      425.      470.      425.         2         0         0       .00   1179.14  10569.34

*SECNO 1.110
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9694.3   10197.0  TYPE=      1  TARGET=      502.700
     1.110      4.93   1518.13   1518.13       .00   1518.67       .54      6.37       .09   1515.80
    1905.0     257.8     755.9     891.3     109.9      90.8     234.0     104.7     143.1   1516.60
      .49      2.35      8.32      3.81      .049      .042      .049      .000   1513.20   9711.98
   .009554      600.      600.      600.         5        14         0       .00    484.42  10196.40

*SECNO 1.204
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
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    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9811.3   10315.8  TYPE=      1  TARGET=      504.500
     1.204      5.44   1523.24   1523.24       .00   1523.80       .55      4.93       .00   1522.00
    1905.0      81.1    1087.5     736.4      29.2     146.1     235.5     109.5     147.9   1522.10
       .51      2.77      7.44      3.13      .049      .042      .049      .000   1517.80   9919.40
   .010193      500.      500.      500.         4         8         0       .00    340.30  10268.19


*SECNO 1.263
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9688.7   10049.4  TYPE=      1  TARGET=      360.700
     1.263      6.30   1528.40   1528.40       .00   1529.24       .84      3.00       .09   1524.90
    1905.0     711.4     945.7     247.8     176.8      99.4      51.7     112.2     149.8   1525.80
       .52      4.02      9.52      4.79      .049      .042      .049      .000   1522.10   9838.43
   .009401      315.      305.      305.        20        11         0       .00    206.29  10044.72


*SECNO 1.331
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9923.0   10077.0  TYPE=      1  TARGET=      154.000
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE 4:1
        ANGLE FROM CULVERT OUTLET.
        FLOODPLAIN DELINETIONS ARE PLOTTED BASED ON WSEL AS PONDED FLOW OUTSIDE
        EFFECTIVE FLOW LIMITS IS POSSIBLE AT THIS SECTION.
     1.331      7.15   1532.25   1532.25       .00   1533.11       .87      3.48       .01   1527.20
    1905.0     942.2     752.8     210.1     196.8      73.0      45.1     114.8     151.3   1529.30
       .54      4.79     10.32      4.66      .049      .042      .049      .000   1525.10   9923.00
   .009674      365.      365.      365.         2         8         0       .00    154.00  10077.00


CCHV=     .300 CEHV=     .500
*SECNO 1.361
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.23

        BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 4' RCBS  - STRUC. NO. 27)
     1.361      4.94   1533.44       .00       .00   1533.83       .39       .57       .14   1534.00
    1905.0        .0    1905.0        .0        .0     380.4        .0     116.1     151.7   1534.00
       .55       .00      5.01       .00      .000      .035      .000      .000   1528.50   9961.50
   .001942      155.      155.      155.         2         0         0       .00     77.00  10038.50
```

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	6	.012	.20	2.70	.00	4.00	12.00	137.00	12	1	1529.00	1528.50

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 1.387

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1533.415 EGOC = 1534.483 PCWSE= 1533.440 ELTRD= 1535.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.09

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1533.41	1534.48	.65	0.	1905.	4.828	288.0	1535.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1537.50 ELREA= 1537.50

END CULVERTS (STRUC. #27)

1.387	5.12	1534.12	.00	.00	1534.48	.36	.65	.00	1534.50
1905.0	.0	1905.0	.0	.0	394.5	.0	117.3	152.0	1534.50
.55	.00	4.83	.00	.000	.012	.000	.000	1529.00	9961.50
.000203	137.	137.	137.	2	0	0	.00	77.00	10038.50

*SECNO 1.396

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .22

1

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

3470 ENCROACHMENT STATIONS= 9900.0 10048.0 TYPE= 1 TARGET= 148.000
ENCRAOCHMENT (ET CARD) APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE 1:1
FLARE ANGLE FROM CULVERT INLET ON LEFT SIDE (LOOKING DOWNSTREAM) AND
INEFFECTIVE FLOW OUTSIDE OF ARMORED WEIR LEVEE ON RIGHT SIDE
FLOODPLAIN AND FLOODWAY DELINEATIONS ARE PLOTTED BASED ON WATER SURF-
ACE ELEV. AS WATER WILL STILL POND BEYOND EFFECTIVE FLOW LIMITS AND
FOR FLOODWAY PURPOSES THE PONDED AREAS ARE RESERVED FOR DETENTION.

1.396	3.13	1534.13	.00	.00	1534.53	.40	.03	.02	1531.50
1905.0	.0	1905.0	.0	.0	375.8	.0	117.7	152.1	100000.00
.56	.00	5.07	.00	.000	.035	.000	.000	1531.00	9900.00
.004091	50.	50.	50.	2	0	0	.00	144.52	10044.52

CCHV= .100 CEHV= .300
*SECNO -.920
START TRIB COMP
-.920 .920 1507.024

```
3470 ENCROACHMENT STATIONS=     9184.0   10587.9  TYPE=      1  TARGET=     1403.900
       BEGIN TRIBUTARY A.  REPEAT CROSS-SECTION .9205
    -.920      2.72   1507.02       .00       .00   1507.15       .12       .00       .00   1505.50
   2391.0    1828.9     552.7       9.4     744.7     144.6       5.7     122.2     156.1   1506.00
      .59      2.46      3.82      1.63      .049      .042      .049      .000   1504.30   9189.07
  .007107      290.      325.      350.         0         0         0       .00   1009.42  10198.49


*SECNO 11.007

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9279.9   10641.5  TYPE=      1  TARGET=     1361.600
       ADD 10 TO TRIB. 5A CROSS-SECTION I.D. NUMBERS. STA. 10280= BASELINE 5A.
   11.007      2.89   1510.79   1510.57       .00   1511.06       .26      3.87       .04   1508.80
   2391.0    1235.6     334.9     820.4     360.7      54.0     205.9     129.7     166.7   1509.00
      .62      3.43      6.21      3.98      .049      .042      .049      .000   1507.90   9308.87
  .011457      430.      460.      425.         7         6         0       .00   1148.75  10565.90


*SECNO 11.117
1
   06MAY93      11:47:04                                                                          PAGE   17


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


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


3470 ENCROACHMENT STATIONS=    10197.0   10748.1  TYPE=      1  TARGET=      551.100
       STA. 10465 = BASELINE 5A.
   11.117      2.46   1515.66       .00       .00   1515.74       .08      4.66       .02   1514.00
    748.0      94.3     159.1     494.6      61.1      51.3     234.9     136.3     176.5   1514.60
      .69      1.54      3.10      2.11      .049      .042      .049      .000   1513.20  10339.86
  .003329      590.      590.      590.         4         0         0       .00    298.77  10638.63


*SECNO 11.210
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10640.0   10810.0  TYPE=      1  TARGET=      170.000
       STA. 10725 = BASELINE 5A.
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1
       FLARE ANGLE OF CULVERT OUTLET.
       FLOODPLAIN DELINEATION BEYOND EFFECTIVE LIMITS BASED ON WSEL AS PONDING
       IS POSSIBLE AT THIS SECTION.
   11.210      1.45   1519.25   1519.25       .00   1519.71       .46      3.55       .11   1518.60
    748.0     375.8     235.3     136.8      73.7      35.3      35.1     139.0     179.0   1518.40
      .72      5.10      6.67      3.90      .049      .042      .049      .000   1517.80  10655.70
  .026993      490.      520.      465.         3        14         0       .00    154.30  10810.00


CCHV=     .300 CEHV=     .500
*SECNO 11.244

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.59
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3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1527.30 ELREA=      1527.30

        BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 8' RCBS  - STRUC. NO. 28)
    11.244      2.21   1521.01       .00       .00   1521.31       .30      1.55       .05   1527.30
     748.0        .0     748.0        .0        .0     169.8        .0     139.7     179.5   1527.30
       .73       .00      4.40       .00      .000      .035      .000      .000   1518.80   9961.50
   .004037      185.      185.      185.         5         0         0       .00     77.00  10038.50


1
   06MAY93      11:47:04                                                                          PAGE   18


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



SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     6         .012      .20      3.00       .00      6.00     12.00    159.00     12        3       1519.30   1518.80

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

$SECNO 11.274

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1521.656  EGOC =   1521.740  PCWSE=   1521.013  ELTRD=   1526.800


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.74

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
   1521.66   1521.74       .42        0.      748.     4.572     432.0   1526.80        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1526.00 ELREA=      1526.00

        END CULVERTS (STRUC. #28)
    11.274      2.11   1521.41       .00       .00   1521.74       .32       .42       .00   1527.80
     748.0        .0     748.0        .0        .0     163.6        .0     140.3     179.8   1527.80
       .74       .00      4.57       .00      .000      .012      .000      .000   1519.30   9961.50
   .000536      159.      159.      159.         2         0         0       .00     77.00  10038.50


$SECNO 11.283
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9912.0   10088.0  TYPE=      1  TARGET=      176.000
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 1:1
        FLARE ANGLE OF CULVERT INLET.
        FLOODPLAIN\FLOODWAY DELINEATION PLOTTRD BASED ON WSEL AS PONDING AND
        POSSIBLE AT THIS SEC. BEYOND EFFECTIVE FLOW LIMITS.
    11.283      1.33   1522.13   1522.13       .00   1522.65       .52       .08       .10   1522.00
     748.0        .0     748.0        .0        .1     129.1        .0     140.4     179.9 100000.00
       .74       .06      5.79       .00      .035      .035      .000      .000   1520.80   9942.99
```

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 .017922      50.      50.      50.       20       14        0      .00   126.49  10069.47


1
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T1     SUN VALLEY PARKWAY NORTH FIS   CONTRACT:FCDMC NO. 90-04
T2     100-YEAR WATER SURFACE PROFILE                    A-N WEST INC. PHX. AZ.
T3     WASH #5 FLOODWAY

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

    -10        3                          0                                1468.86

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

    15                 -1

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


 #PROF 2
0

 CCHV=     .100 CEHV=     .300
 #SECNO  .059
 3280 CROSS SECTION       .06 EXTENDED       .56 FEET


 3470 ENCROACHMENT STATIONS=    10054.4   10523.2  TYPE=      1  TARGET=      468.770
        FLOODWAY MODEL USING FIXED ENCROACHMENTS (METHOD 1) BASED ON PREVIOUS
        ANALYSIS BY EQUAL CONVEYANCE REDUCTION METHOD (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH WASH 5 WEST ALONG BASELINE.
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        CROZIER ROAD (219 TH AVE) CROSSES 100 FT. UPSTREAM OF THIS SECTION
        AS AN AT-GRADE CROSSING (A.K.A. DIP SECTION)
      .059      3.96   1468.86       .00   1467.86   1469.12       .26       .00       .00   1467.40
    2469.0       .0     354.9    2114.1       .0      52.9     617.3       .0        .0   1466.00
      .00       .00      6.71      3.42      .000      .042      .049      .000   1464.90  10054.40
   .008274       0.        0.        0.         0         0         0       .00    468.77  10523.17


 #SECNO  .153
 3280 CROSS SECTION       .15 EXTENDED       .33 FEET


 3470 ENCROACHMENT STATIONS=     9669.2   10325.0  TYPE=      1  TARGET=      655.800
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
        ON LEFT SIDE AT THIS SECTION.
      .153      3.03   1473.43       .00   1472.43   1473.64       .21      4.51       .00   1472.50
    2469.0       .0     483.4    1985.6       .0      89.9     642.9       8.3       6.6   1472.10
      .04       .00      5.38      3.09      .000      .042      .049      .000   1470.40   9669.20
   .008755      680.      680.      500.         5         0         0       .00    655.80  10325.00
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#SECNO  .265
3280 CROSS SECTION       .27 EXTENDED       .36 FEET


3470 ENCROACHMENT STATIONS=     9562.9   10072.0  TYPE=      1  TARGET=      509.100
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
1
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       ON RIGHT SIDE FROM SEC. .2652 TO .8664.
     .265      3.16   1479.16       .00   1478.17   1479.38       .22      5.74       .00   1477.40
   2469.0        .0     319.0    2150.0        .0      58.1     620.3      18.9      15.2   1477.10
     .09       .00      5.49      3.47      .000      .042      .049      .000   1476.00   9562.90
  .008730     750.      740.      640.         5         0         0       .00    509.10  10072.00


#SECNO  .418
3280 CROSS SECTION       .42 EXTENDED       .93 FEET


3470 ENCROACHMENT STATIONS=     9922.2   10300.0  TYPE=      1  TARGET=      377.800
     .418      3.13   1485.63       .00   1484.63   1485.95       .32      6.54       .03   1483.50
   2469.0        .0     315.5    2153.5        .0      48.6     517.8      28.5      22.0   1483.70
     .13       .00      6.49      4.16      .000      .042      .049      .000   1482.50   9922.20
  .010944     650.      680.      670.         5         0         0       .00    377.80  10300.00


#SECNO  .518
3280 CROSS SECTION       .52 EXTENDED       .66 FEET


3470 ENCROACHMENT STATIONS=    10047.3   10314.0  TYPE=      1  TARGET=      266.700
     .518      3.46   1490.66       .00   1489.68   1490.98       .32      5.03       .00   1488.60
   2469.0        .0     442.1    2026.9        .0      79.1     476.3      35.6      26.1   1488.30
     .17       .00      5.59      4.26      .000      .042      .049      .000   1487.20  10047.30
  .007722     550.      560.      550.         4         0         0       .00    266.70  10314.00


#SECNO  .642
3280 CROSS SECTION       .64 EXTENDED       .96 FEET


3470 ENCROACHMENT STATIONS=     9893.0   10138.0  TYPE=      1  TARGET=      245.000
     .642      4.76   1495.86       .00   1494.86   1496.28       .42      5.27       .03   1493.40
   2469.0        .0     437.2    2031.8        .0      60.4     434.5      42.9      29.7   1493.20
     .20       .00      7.23      4.68      .000      .042      .049      .000   1491.10   9893.00
  .009720     670.      660.      600.         4         0         0       .00    245.00  10138.00


#SECNO  .775

3470 ENCROACHMENT STATIONS=     9888.0   10090.2  TYPE=      1  TARGET=      202.200
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW WITHIN RIDGE
       ON LEFT SIDE FROM SEC. .7746 TO 1.2632.
     .775      4.13   1501.53       .00   1500.57   1501.88       .36      5.59       .01   1498.00
   2397.0    1794.1     602.9        .0     421.0      97.9        .0      51.3      33.4 100000.00
     .24      4.26      6.16       .00      .049      .042      .000      .000   1497.40   9888.00
  .006184     730.      780.      700.         4         0         0       .00    202.20  10090.20


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   06MAY93      11:47:04                                                                                                PAGE   22


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


*SECNO  .866
3280 CROSS SECTION      .87 EXTENDED      .65 FEET


3470 ENCROACHMENT STATIONS=    9836.2   10069.5  TYPE=      1  TARGET=     233.300
     .866     4.05   1505.45      .00   1504.52   1505.89      .44     3.98      .02   1503.80
   2397.0   1788.3    608.7       .0     360.3     98.4       .0     56.9     35.8 100000.00
     .27     4.96     6.18      .00      .049     .042     .000     .000   1501.40   9836.20
  .011017     490.     500.     500.         2        0        0      .00    233.30  10069.50


*SECNO  .920

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


3470 ENCROACHMENT STATIONS=    9800.0   10187.3  TYPE=      1  TARGET=     387.300
     .920     3.52   1507.82      .00   1507.02   1508.01      .19     2.09      .02   1505.50
   2397.0   1468.8    928.2       .0     487.6     223.8       .0     60.9     37.9 100000.00
     .29     3.01     4.15      .00      .049     .042     .000     .000   1504.30   9800.00
  .004782     290.     325.     350.         3        0        0      .00    387.30  10187.30


*SECNO  .998

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


3470 ENCROACHMENT STATIONS=    9981.0   10276.8  TYPE=      1  TARGET=     295.800
     .998     3.19   1511.09      .00   1510.81   1511.52      .43     3.44      .07   1510.60
   2397.0       .0     282.5    2114.5        .0      52.0    404.9     66.7     41.3   1510.00
     .32      .00      5.44      5.22      .000      .042     .049     .000   1507.90   9981.00
  .015369     425.     470.     425.         3        0        0      .00    295.80  10276.80


*SECNO 1.110
3280 CROSS SECTION      1.11 EXTENDED      .60 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
1
   06MAY93      11:47:04                                                                    PAGE   23


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


3470 ENCROACHMENT STATIONS=    9975.0   10120.0  TYPE=      1  TARGET=     145.000
    1.110     5.60   1518.80   1518.80   1518.13   1519.77      .96     7.85      .16   1515.80
   1905.0    115.1    1049.7     740.3      22.2     106.4    176.1     72.0     44.4   1516.60
      .34     5.19      9.87      4.20      .049     .042     .049     .000   1513.20   9975.00
  .010877     600.     600.     600.         4       14        0      .00    145.00  10120.00
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```
*SECNO 1.204

3470 ENCROACHMENT STATIONS=     9975.6   10115.0  TYPE=      1  TARGET=      139.400
     1.204      6.11   1523.91       .00   1523.24   1524.61       .70      4.82       .03   1522.00
    1905.0        .0    1351.2     553.8        .0     177.9     145.7      75.6      46.0   1522.10
       .36       .00      7.59      3.80      .000      .042      .049      .000   1517.80   9975.60
   .008588      500.      500.      500.         3         0         0       .00    139.40  10115.00


*SECNO 1.263

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=     9985.4   10049.4  TYPE=      1  TARGET=       64.000
     1.263      7.17   1529.27   1529.27   1528.40   1530.84      1.57      3.25       .26   1524.90
    1905.0        .0    1319.4     585.6        .0     117.0      89.7      77.4      46.7   1525.80
       .37       .00     11.28      6.53      .000      .042      .049      .000   1522.10   9985.40
   .013593      315.      305.      305.        20         8         0       .00     64.00  10049.40


*SECNO 1.331
3280 CROSS SECTION      1.33 EXTENDED       .50 FEET


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9950.0   10055.0  TYPE=      1  TARGET=      105.000
1
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        ENCROACHMENT (ET CARD) APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE 4:1
        ANGLE FROM CULVERT OUTLET.
        FLOODPLAIN DELINETIONS ARE PLOTTED BASED ON WSEL AS PONDED FLOW OUTSIDE
        EFFECTIVE FLOW LIMITS IS POSSIBLE AT THIS SECTION.
     1.331      8.10   1533.20       .00   1532.25   1533.79       .58      2.84       .10   1527.20
    1905.0    1149.7     699.6      55.7     254.5      84.9      16.1      79.8      47.4   1529.30
       .39      4.52      8.24      3.46      .049      .042      .049      .000   1525.10   9950.00
   .005041      365.      365.      365.         3         0         0       .00    105.00  10055.00


CCHV=     .300 CEHV=     .500
*SECNO 1.361

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.87

        BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 4' RCBS  - STRUC. NO. 27)
     1.361      5.42   1533.92       .00   1533.44   1534.24       .32       .38       .08   1534.00
    1905.0        .0    1905.0        .0        .0     417.5        .0      81.2      47.8   1534.00
       .39       .00      4.56       .00      .000      .035      .000      .000   1528.50   9961.50
   .001446      155.      155.      155.         2         0         0       .00     77.00  10038.50


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     CDFO      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     6         .012      .20      2.70       .00      4.00     12.00     137.00     12        1       1529.00   1528.50
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CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO 1.387

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1533.415  EGOC =   1534.963  PCWSE=   1533.920  ELTRD=   1535.000

3280 CROSS SECTION      1.39 EXTENDED       .17 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.13

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
  1533.41   1534.96       .72        0.     1905.     4.364     288.0   1535.00        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1537.50 ELREA=      1537.50

        END CULVERTS (STRUC. #27)
    1.387      5.67   1534.67       .00   1534.12   1534.96       .30       .72       .00   1534.50
   1905.0        .0    1905.0        .0        .0     436.5        .0      82.5      48.0   1534.50
      .40       .00      4.36       .00      .000      .012      .000      .000   1529.00   9961.50
  .000147      137.      137.      137.         2         0         0       .00     77.00  10038.50


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


*SECNO 1.396

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .26


3470 ENCROACHMENT STATIONS=     9900.0   10048.0  TYPE=      1  TARGET=      148.000
        ENCRAOCHMENT (ET CARD) APPLIED TO LIMIT INEFFECTIVE FLOW OUTSIDE 1:1
        FLARE ANGLE FROM CULVERT INLET ON LEFT SIDE (LOOKING DOWNSTREAM) AND
        INEFFECTIVE FLOW OUTSIDE OF ARMORED WEIR LEVEE ON RIGHT SIDE
        FLOODPLAIN AND FLOODWAY DELINEATIONS ARE PLOTTED BASED ON WATER SURF-
        ACE ELEV. AS WATER WILL STILL POND BEYOND EFFECTIVE FLOW LIMITS AND
        FOR FLOODWAY PURPOSES THE PONDED AREAS ARE RESERVED FOR DETENTION.
    1.396      3.73   1534.73       .00   1534.13   1534.99       .26       .02       .01   1531.50
   1905.0        .0    1905.0        .0        .0     463.0        .0      83.0      48.1 100000.00
      .41       .00      4.11       .00      .000      .035      .000      .000   1531.00   9900.00
  .002098       50.       50.       50.         2         0         0       .00    146.91  10046.91


CCHV=     .100 CEHV=     .300
*SECNO  -.920
START TRIB COMP
     -.920      .920  1507.818

3470 ENCROACHMENT STATIONS=     9800.0   10187.3  TYPE=      1  TARGET=      387.300
        BEGIN TRIBUTARY A.  REPEAT CROSS-SECTION .9205
    -.920      3.52   1507.82       .00   1507.02   1508.01       .19       .00       .00   1505.50
```

```
   2391.0    1464.8     926.2       .0     486.9     223.6       .0      87.2      50.0 100000.00
      .43      3.01      4.14      .00      .049      .042     .000      .000   1504.30   9800.00
  .004778      290.      325.     350.         0         0        0       .00    387.30  10187.30


*SECNO 11.007

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


3470 ENCROACHMENT STATIONS=     9981.0   10276.8  TYPE=      1  TARGET=      295.800
       ADD 10 TO TRIB. 5A CROSS-SECTION I.D. NUMBERS. STA. 10280= BASELINE 5A.
   11.007      3.17   1511.07   1510.90   1510.79   1511.54       .47      3.45       .08   1508.80
   2391.0    1938.3     452.7        .0     391.4      61.2        .0      93.0      53.4 100000.00
      .45      4.95      7.40       .00      .049      .042      .000      .000   1507.90   9981.00
  .015286      430.      460.      425.         7        10         0       .00    295.80  10276.80


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   06MAY93      11:47:04                                                                          PAGE   26


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


*SECNO 11.117

3470 ENCROACHMENT STATIONS=    10400.0   10545.0  TYPE=      1  TARGET=      145.000
       STA. 10465 = BASELINE 5A.
   11.117      3.05   1516.25       .00   1515.66   1516.35       .10      4.77       .04   1514.00
    748.0      62.1     208.3     477.6      28.5      67.3     207.8      98.2      56.4   1514.60
      .52      2.18      3.09      2.30      .049      .042      .049      .000   1513.20  10400.00
  .002308      590.      590.      590.         4         0         0       .00    145.00  10545.00


*SECNO 11.210

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=    10700.0   10800.0  TYPE=      1  TARGET=      100.000
       STA. 10725 = BASELINE 5A.
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 4:1
       FLARE ANGLE OF CULVERT OUTLET.
       FLOODPLAIN DELINEATION BEYOND EFFECTIVE LIMITS BASED ON WSEL AS PONDING
       IS POSSIBLE AT THIS SECTION.
   11.210      1.86   1519.66   1519.66   1519.25   1520.27       .62      2.62       .15   1518.60
    748.0     205.0     351.9     191.1      38.2      46.9      42.0     100.6      57.8   1518.40
      .54      5.36      7.50      4.56      .049      .042      .049      .000   1517.80  10700.00
  .023346      490.      520.      465.        20        14         0       .00    100.00  10800.00


CCHV=     .300 CEHV=     .500
*SECNO 11.244

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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1527.30 ELREA=      1527.30
```

BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 8' RCBS - STRUC. NO. 28)

11.244	2.48	1521.28	.00	1521.01	1521.52	.24	1.13	.11	1527.30
748.0	.0	748.0	.0	.0	190.7	.0	101.2	58.1	1527.30
.56	.00	3.92	.00	.000	.035	.000	.000	1518.80	9961.50
.002766	185.	185.	185.	5	0	0	.00	77.00	10038.50

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06MAY93 11:47:04 PAGE 27

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

SPECIAL CULVERT

SC	CUND	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	6	.012	.20	3.00	.00	6.00	12.00	159.00	12	3	1519.30	1518.80

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 11.274

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1521.656 EGOC = 1521.796 PCWSE= 1521.277 ELTRD= 1526.800

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.41

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1521.66	1521.80	.28	0.	748.	4.412	432.0	1526.80	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1526.00 ELREA= 1526.00

END CULVERTS (STRUC. #28)

11.274	2.19	1521.49	.00	1521.41	1521.80	.30	.28	.00	1527.80
748.0	.0	748.0	.0	.0	169.5	.0	101.9	58.4	1527.80
.57	.00	4.41	.00	.000	.012	.000	.000	1519.30	9961.50
.000477	159.	159.	159.	2	0	0	.00	77.00	10038.50

*SECNO 11.283
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9912.0 10088.0 TYPE= 1 TARGET= 176.000
ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 1:1
FLARE ANGLE OF CULVERT INLET.
FLOODPLAIN\FLOODWAY DELINEATION PLOTTRD BASED ON WSEL AS PONDING AND
POSSIBLE AT THIS SEC. BEYOND EFFECTIVE FLOW LIMITS.

11.283	1.33	1522.13	1522.13	1522.13	1522.65	.52	.07	.11	1522.00
748.0	.0	748.0	.0	.1	129.3	.0	102.1	58.5	100000.00
.57	.06	5.79	.00	.035	.035	.000	.000	1520.80	9942.98
.017869	50.	50.	50.	20	14	0	.00	126.52	10069.50

THIS RUN EXECUTED 06MAY93 11:48:58

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH NO. 5 100-YEAR PRO

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	.059	2469.00	1467.86	.00	5.61	.00	10054.40	10069.70	.00	.00	9604.21	11606.90
	.059	2469.00	1468.86	.00	6.71	.00	10054.40	10069.70	10054.40	10523.17	10054.40	10523.17
	.153	2469.00	1472.43	.00	3.71	680.00	9669.20	9711.40	9507.40	11645.20	9624.29	11621.48
	.153	2469.00	1473.43	.00	5.38	680.00	9669.20	9711.40	9669.20	10325.00	9669.20	10325.00
	.265	2469.00	1478.17	.00	3.87	740.00	9562.90	9588.30	9430.70	11186.70	9519.82	11175.73
	.265	2469.00	1479.16	.00	5.49	740.00	9562.90	9588.30	9562.90	10072.00	9562.90	10072.00
	.418	2469.00	1484.63	.00	5.15	680.00	9922.20	9940.80	9700.70	10782.90	9703.20	10746.53
	.418	2469.00	1485.63	.00	6.49	680.00	9922.20	9940.80	9922.20	10300.00	9922.20	10300.00
	.518	2469.00	1489.68	.00	4.16	560.00	10047.30	10077.90	9748.40	10688.80	9793.00	10664.76
	.518	2469.00	1490.66	.00	5.59	560.00	10047.30	10077.90	10047.30	10314.00	10047.30	10314.00
	.642	2469.00	1494.86	.00	6.21	660.00	9893.00	9910.10	9400.00	10488.40	9531.16	10484.98
	.642	2469.00	1495.86	.00	7.23	660.00	9893.00	9910.10	9893.00	10138.00	9893.00	10138.00
	.775	2397.00	1500.57	.00	5.48	780.00	10063.00	10090.20	9276.70	10226.30	9280.79	10215.03
	.775	2397.00	1501.53	.00	6.16	780.00	10063.00	10090.20	9888.00	10090.20	9888.00	10090.20
	.866	2397.00	1504.52	.00	4.18	500.00	10025.50	10069.50	9222.70	10221.40	9225.89	10196.45
	.866	2397.00	1505.45	.00	6.18	500.00	10025.50	10069.50	9836.20	10069.50	9836.20	10069.50
	.920	2397.00	1507.02	.00	3.83	325.00	10087.70	10187.30	9184.00	10587.90	9189.10	10198.48
*	.920	2397.00	1507.82	.00	4.15	325.00	10087.70	10187.30	9800.00	10187.30	9800.00	10187.30
	.998	2397.00	1510.81	.00	4.09	470.00	9981.00	10017.70	9279.90	10641.50	9308.70	10569.34
*	.998	2397.00	1511.09	.00	5.44	470.00	9981.00	10017.70	9981.00	10276.80	9981.00	10276.80
*	1.110	1905.00	1518.13	1518.13	8.32	600.00	9983.00	10006.00	9694.30	10197.00	9711.98	10196.40
*	1.110	1905.00	1518.80	1518.80	9.87	600.00	9983.00	10006.00	9975.00	10120.00	9975.00	10120.00

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	1.204	1905.00	1523.24	1523.24	7.44	500.00	9975.60	10023.10	9811.30	10315.80	9919.40	10268.19
	1.204	1905.00	1523.91	.00	7.59	500.00	9975.60	10023.10	9975.60	10115.00	9975.60	10115.00

*	1.263	1905.00	1528.40	1528.40	9.52	305.00	9985.40	10005.60	9688.70	10049.40	9838.43	10044.72
*	1.263	1905.00	1529.27	1529.27	11.28	305.00	9985.40	10005.60	9985.40	10049.40	9985.40	10049.40
*	1.331	1905.00	1532.25	1532.25	10.32	365.00	10038.20	10050.70	9923.00	10077.00	9923.00	10077.00
*	1.331	1905.00	1533.20	.00	8.24	365.00	10038.20	10050.70	9950.00	10055.00	9950.00	10055.00
*	1.361	1905.00	1533.44	.00	5.01	155.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	1.361	1905.00	1533.92	.00	4.56	155.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	1.387	1905.00	1534.12	.00	4.83	137.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	1.387	1905.00	1534.67	.00	4.36	137.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	1.396	1905.00	1534.13	.00	5.07	50.00	9900.00	10048.00	9900.00	10048.00	9900.00	10044.52
*	1.396	1905.00	1534.73	.00	4.11	50.00	9900.00	10048.00	9900.00	10048.00	9900.00	10046.91
	-.920	2391.00	1507.02	.00	3.82	325.00	10087.70	10187.30	9184.00	10587.90	9189.07	10198.49
	-.920	2391.00	1507.82	.00	4.14	325.00	10087.70	10187.30	9800.00	10187.30	9800.00	10187.30
	11.007	2391.00	1510.79	1510.57	6.21	460.00	10251.20	10276.80	9279.90	10641.50	9308.87	10565.90
*	11.007	2391.00	1511.07	1510.90	7.40	460.00	10251.20	10276.80	9981.00	10276.80	9981.00	10276.80
*	11.117	748.00	1515.66	.00	3.10	590.00	10413.60	10440.80	10197.00	10748.10	10339.86	10638.63
	11.117	748.00	1516.25	.00	3.09	590.00	10413.60	10440.80	10400.00	10545.00	10400.00	10545.00
*	11.210	748.00	1519.25	1519.25	6.67	520.00	10729.30	10758.00	10640.00	10810.00	10655.70	10810.00
*	11.210	748.00	1519.66	1519.66	7.50	520.00	10729.30	10758.00	10700.00	10800.00	10700.00	10800.00
*	11.244	748.00	1521.01	.00	4.40	185.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.244	748.00	1521.28	.00	3.92	185.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.274	748.00	1521.41	.00	4.57	159.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.274	748.00	1521.49	.00	4.41	159.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.283	748.00	1522.13	1522.13	5.79	50.00	9944.00	10090.00	9912.00	10088.00	9942.99	10069.47
*	11.283	748.00	1522.13	1522.13	5.79	50.00	9944.00	10090.00	9912.00	10088.00	9942.98	10069.50

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WASH NO. 5 100-YEAR PRO

SUMMARY PRINTOUT

SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
.059	336.45	210.89	1921.66	1.69	5.61	2.27	1468.30	1467.86	.00	1953.89	1464.90	1.36
.059	.00	354.88	2114.12	.00	6.71	3.42	1468.30	1468.86	.00	468.77	1464.90	1.22
.153	1.23	176.21	2291.56	.46	3.71	2.58	1473.10	1472.43	4.56	1520.05	1470.40	1.03
.153	.00	483.38	1985.62	.00	5.38	3.09	1473.10	1473.43	4.57	655.80	1470.40	1.17
.265	20.77	127.90	2320.33	1.70	3.87	2.53	1478.80	1478.17	5.74	1554.52	1476.00	1.04
.265	.00	318.98	2150.02	.00	5.49	3.47	1478.80	1479.16	5.73	509.10	1476.00	1.08
.418	500.95	154.75	1813.30	2.93	5.15	3.30	1484.70	1484.63	6.46	963.36	1482.50	1.05
.418	.00	315.47	2153.53	.00	6.49	4.16	1484.70	1485.63	6.47	377.80	1482.50	1.08
.518	561.04	203.85	1704.11	2.58	4.16	2.92	1490.00	1489.68	5.05	871.76	1487.20	1.05
.518	.00	442.08	2026.92	.00	5.59	4.26	1490.00	1490.66	5.03	266.70	1487.20	1.04
.642	833.90	268.87	1366.23	2.96	6.21	2.85	1494.90	1494.86	5.18	953.82	1491.10	1.24
.642	.00	437.23	2031.77	.00	7.23	4.68	1494.90	1495.86	5.20	245.00	1491.10	1.10
.775	1961.84	393.97	41.19	2.74	5.48	1.31	1501.90	1500.57	5.71	934.25	1497.40	1.30

	.775	1794.10	602.90	.00	4.26	6.16	.00	1501.90	1501.53	5.66	202.20	1497.40	1.08
	.866	1938.10	239.74	219.16	2.87	4.18	2.85	1504.80	1504.52	3.95	970.56	1501.40	1.04
	.866	1788.30	608.70	.00	4.96	6.18	.00	1504.80	1505.45	3.93	233.30	1501.40	1.03
	.920	1833.39	554.23	9.37	2.46	3.83	1.64	1510.00	1507.02	2.51	1009.39	1504.30	1.12
*	.920	1468.75	928.25	.00	3.01	4.15	.00	1510.00	1507.82	2.36	387.30	1504.30	1.08
	.998	48.73	169.45	2178.81	.97	4.09	4.04	1511.90	1510.81	3.79	1179.14	1507.90	1.11
*	.998	.00	282.54	2114.46	.00	5.44	5.22	1511.90	1511.09	3.27	295.80	1507.90	1.00
*	1.110	257.84	755.88	891.27	2.35	8.32	3.81	1518.20	1518.13	7.32	484.42	1513.20	1.82
*	1.110	115.05	1049.65	740.29	5.19	9.87	4.20	1518.20	1518.80	7.71	145.00	1513.20	1.59
*	1.204	81.09	1087.52	736.39	2.77	7.44	3.13	1524.00	1523.24	5.11	340.30	1517.80	1.66
	1.204	.00	1351.22	553.78	.00	7.59	3.80	1524.00	1523.91	5.11	139.40	1517.80	1.30
*	1.263	711.45	945.74	247.81	4.02	9.52	4.79	1530.00	1528.40	5.16	206.29	1522.10	1.60
*	1.263	.00	1319.42	585.58	.00	11.28	6.53	1530.00	1529.27	5.36	64.00	1522.10	1.19
*	1.331	942.19	752.76	210.05	4.79	10.32	4.66	1532.70	1532.25	3.85	154.00	1525.10	1.52
*	1.331	1149.66	699.60	55.74	4.52	8.24	3.46	1532.70	1533.20	3.93	105.00	1525.10	1.31
*	1.361	.00	1905.00	.00	.00	5.01	.00	1534.00	1533.44	1.19	77.00	1528.50	1.00
*	1.361	.00	1905.00	.00	.00	4.56	.00	1534.00	1533.92	.72	77.00	1528.50	1.00
*	1.387	.00	1905.00	.00	.00	4.83	.00	1534.50	1534.12	.68	77.00	1529.00	1.00
*	1.387	.00	1905.00	.00	.00	4.36	.00	1534.50	1534.67	.75	77.00	1529.00	1.00

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	1.396	.00	1905.00	.00	.00	5.07	.00	1535.00	1534.13	.01	144.52	1531.00	1.00
*	1.396	.00	1905.00	.00	.00	4.11	.00	1535.00	1534.73	.06	146.91	1531.00	1.00
	-.920	1828.90	552.74	9.35	2.46	3.82	1.63	1510.00	1507.02	-27.11	1009.42	1504.30	1.12
	-.920	1464.75	926.25	.00	3.01	4.14	.00	1510.00	1507.82	-26.91	387.30	1504.30	1.08
	11.007	1235.64	334.94	820.42	3.43	6.21	3.98	1511.90	1510.79	3.77	1148.75	1507.90	1.14
*	11.007	1938.29	452.71	.00	4.95	7.40	.00	1511.90	1511.07	3.25	295.80	1507.90	1.08
*	11.117	94.28	159.11	494.61	1.54	3.10	2.11	1518.10	1515.66	4.86	298.77	1513.20	1.14
	11.117	62.07	208.33	477.60	2.18	3.09	2.30	1518.10	1516.25	5.18	145.00	1513.20	1.06
*	11.210	375.85	235.33	136.82	5.10	6.67	3.90	1524.00	1519.25	3.59	154.30	1517.80	1.11
*	11.210	204.99	351.91	191.10	5.36	7.50	4.56	1524.00	1519.66	3.41	100.00	1517.80	1.14
*	11.244	.00	748.00	.00	.00	4.40	.00	1527.30	1521.01	1.76	77.00	1518.80	1.00
*	11.244	.00	748.00	.00	.00	3.92	.00	1527.30	1521.28	1.62	77.00	1518.80	1.00
*	11.274	.00	748.00	.00	.00	4.57	.00	1527.80	1521.41	.40	77.00	1519.30	1.00
*	11.274	.00	748.00	.00	.00	4.41	.00	1527.80	1521.49	.22	77.00	1519.30	1.00
*	11.283	.00	748.00	.00	.06	5.79	.00	1526.00	1522.13	.71	126.49	1520.80	1.00
*	11.283	.00	747.99	.00	.06	5.79	.00	1526.00	1522.13	.63	126.52	1520.80	1.00

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WASH NO. 5 100-YEAR PRO

SUMMARY PRINTOUT

	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	.059	.00	.00	1467.97	.11	.00	.00	81.05	.00	2.96	49.00	42.00	49.00
	.059	.00	.00	1469.12	.26	.00	.00	82.74	.00	3.96	.00	42.00	49.00
	.153	680.00	8.09	1472.54	.11	4.56	.00	92.99	12.20	2.03	49.00	42.00	49.00
	.153	680.00	8.09	1473.64	.21	4.51	.00	87.55	8.35	3.03	.00	42.00	49.00
	.265	740.00	7.57	1478.27	.11	5.73	.00	84.67	26.27	2.17	49.00	42.00	49.00
	.265	740.00	7.57	1479.38	.22	5.74	.00	87.30	18.88	3.16	.00	42.00	49.00
	.418	680.00	9.56	1484.81	.18	6.51	.02	113.36	39.40	2.13	49.00	42.00	49.00
	.418	680.00	9.56	1485.95	.32	6.54	.03	109.44	28.47	3.13	.00	42.00	49.00
	.518	560.00	8.39	1489.81	.14	5.00	.00	74.44	49.50	2.48	49.00	42.00	49.00
	.518	560.00	8.39	1490.98	.32	5.03	.00	77.22	35.57	3.46	.00	42.00	49.00
	.642	660.00	5.91	1495.04	.18	5.21	.01	93.81	61.34	3.76	49.00	42.00	49.00
	.642	660.00	5.91	1496.28	.42	5.27	.03	97.20	42.90	4.76	.00	42.00	49.00
	.775	780.00	8.08	1500.74	.17	5.70	.00	65.96	74.83	3.17	49.00	42.00	49.00
	.775	780.00	8.08	1501.88	.36	5.59	.01	61.84	51.33	4.13	49.00	42.00	.00
	.866	500.00	8.00	1504.66	.14	3.92	.00	98.20	84.02	3.12	49.00	42.00	49.00
	.866	500.00	8.00	1505.89	.44	3.98	.02	110.17	56.85	4.05	49.00	42.00	.00
	.920	325.00	8.92	1507.15	.13	2.49	.00	71.52	89.82	2.72	49.00	42.00	49.00
*	.920	325.00	8.92	1508.01	.19	2.09	.02	47.82	60.88	3.52	49.00	42.00	.00
	.998	470.00	7.66	1511.06	.25	3.87	.04	115.77	97.36	2.91	49.00	42.00	49.00
*	.998	470.00	7.66	1511.52	.43	3.44	.07	153.69	66.72	3.19	.00	42.00	49.00
*	1.110	600.00	8.83	1518.67	.54	6.37	.09	95.54	104.69	4.93	49.00	42.00	49.00
*	1.110	600.00	8.83	1519.77	.96	7.85	.16	108.77	71.97	5.60	49.00	42.00	49.00
*	1.204	500.00	9.20	1523.80	.55	4.93	.00	101.93	109.55	5.44	49.00	42.00	49.00
	1.204	500.00	9.20	1524.61	.70	4.82	.03	85.88	75.57	6.11	.00	42.00	49.00
*	1.263	305.00	14.10	1529.24	.84	3.00	.09	94.01	112.16	6.30	49.00	42.00	49.00
*	1.263	305.00	14.10	1530.84	1.57	3.25	.26	135.93	77.43	7.17	.00	42.00	49.00
*	1.331	365.00	8.22	1533.11	.87	3.48	.01	96.74	114.85	7.15	49.00	42.00	49.00
*	1.331	365.00	8.22	1533.79	.58	2.84	.10	50.41	79.78	8.10	49.00	42.00	49.00
*	1.361	155.00	21.94	1533.83	.39	.57	.14	19.42	116.09	4.94	.00	35.00	.00
*	1.361	155.00	21.94	1534.24	.32	.38	.08	14.46	81.16	5.42	.00	35.00	.00
*	1.387	137.00	3.65	1534.48	.36	.65	.00	2.03	117.31	5.12	.00	12.00	.00
*	1.387	137.00	3.65	1534.96	.30	.72	.00	1.47	82.50	5.67	.00	12.00	.00

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	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
*	1.396	50.00	40.00	1534.53	.40	.03	.02	40.91	117.75	3.13	.00	35.00	.00
*	1.396	50.00	40.00	1534.99	.26	.02	.01	20.98	83.02	3.73	.00	35.00	.00
	-.920	325.00	.00	1507.15	.12	.00	.00	71.07	122.19	2.72	49.00	42.00	49.00
	-.920	325.00	.00	1508.01	.19	.00	.00	47.78	87.20	3.52	49.00	42.00	.00
	11.007	460.00	7.83	1511.06	.26	3.87	.04	114.57	129.73	2.89	49.00	42.00	49.00
*	11.007	460.00	7.83	1511.54	.47	3.45	.08	152.86	93.04	3.17	49.00	42.00	.00

*	11.117	590.00	8.98	1515.74	.08	4.66	.02	33.29	136.28	2.46	49.00	42.00	49.00
	11.117	590.00	8.98	1516.35	.10	4.77	.04	23.08	98.16	3.05	49.00	42.00	49.00
*	11.210	520.00	8.85	1519.71	.46	3.55	.11	269.93	139.00	1.45	49.00	42.00	49.00
*	11.210	520.00	8.85	1520.27	.62	2.62	.15	233.46	100.55	1.86	49.00	42.00	49.00
*	11.244	185.00	5.41	1521.31	.30	1.55	.05	40.37	139.67	2.21	.00	35.00	.00
*	11.244	185.00	5.41	1521.52	.24	1.13	.11	27.66	101.23	2.48	.00	35.00	.00
*	11.274	159.00	3.14	1521.74	.32	.42	.00	5.36	140.27	2.11	.00	12.00	.00
*	11.274	159.00	3.14	1521.80	.30	.28	.00	4.77	101.88	2.19	.00	12.00	.00
*	11.283	50.00	30.00	1522.65	.52	.08	.10	179.22	140.44	1.33	35.00	35.00	.00
*	11.283	50.00	30.00	1522.65	.52	.07	.11	178.69	102.05	1.33	35.00	35.00	.00

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SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .920  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .998  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.110  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.110  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.110  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.110  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     1.204  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.204  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     1.263  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.263  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.263  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     1.263  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.263  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.263  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     1.331  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.331  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     1.331  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.361  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.361  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.387  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.387  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.396  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.396  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    11.007  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    11.117  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    11.210  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    11.210  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    11.210  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    11.210  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    11.210  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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WARNING SECNO=     11.244  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     11.244  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     11.274  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     11.274  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     11.283  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.283  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     11.283  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
1
   06MAY93      11:47:04                                                                    PAGE   35


CAUTION SECNO=     11.283  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.283  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     11.283  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

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   06MAY93      11:47:04                                                                    PAGE   36
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FLOODWAY DATA, WASH NO. 5 100-YEAR PRO
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.059	469.	670.	3.7	1468.9	1467.9	1.0
.153	656.	733.	3.4	1473.4	1472.4	1.0
.265	509.	678.	3.6	1479.2	1478.2	1.0
.418	378.	566.	4.4	1485.6	1484.6	1.0
.518	267.	555.	4.4	1490.7	1489.7	1.0
.642	245.	495.	5.0	1495.9	1494.9	1.0
.775	202.	519.	4.6	1501.6	1500.6	1.0
.866	233.	459.	5.2	1505.4	1504.5	.9
.920	387.	711.	3.4	1507.8	1507.0	.8
.998	296.	457.	5.2	1511.1	1510.8	.3
1.110	145.	305.	6.3	1518.8	1518.1	.7
1.204	139.	324.	5.9	1523.9	1523.2	.7
1.263	64.	207.	9.2	1529.3	1528.4	.9
1.331	105.	356.	5.4	1533.2	1532.2	1.0
1.361	77.	417.	4.6	1533.9	1533.4	.5
1.387	77.	436.	4.4	1534.6	1534.1	.5
1.396	147.	463.	4.1	1534.7	1534.1	.6
-.920	387.	710.	3.4	1507.8	1507.0	.8
11.007	296.	453.	5.3	1511.1	1510.8	.3
11.117	145.	304.	2.5	1516.3	1515.7	.6
11.210	100.	127.	5.9	1519.6	1519.2	.4
11.244	77.	191.	3.9	1521.3	1521.0	.3
11.274	77.	170.	4.4	1521.5	1521.4	.1
11.283	127.	129.	5.8	1522.1	1522.1	.0

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1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.0;  February 1991       *
 *                                        *
 *  RUN DATE    06MAY93    TIME   11:49:24 *
 *****************************************
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*************************************
 *  U.S. ARMY CORPS OF ENGINEERS     *
 *  HYDROLOGIC ENGINEERING CENTER    *
 *  609 SECOND STREET, SUITE D       *
 *  DAVIS, CALIFORNIA 95616-4687     *
 *         (916) 756-1104            *
*************************************
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X     X  XXXXXXX   XXXXX              XXXXX
X     X  X       X     X            X     X
X     X  X       X                        X
XXXXXXX  XXXX    X          XXXXX    XXXXX
X     X  X       X                  X
X     X  X       X     X            X
X     X  XXXXXXX   XXXXX            XXXXXXX
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1
   06MAY93      11:49:24                                                                    PAGE    1
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                                                                THIS RUN EXECUTED 06MAY93    11:49:25
*********************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.0;  February 1991
*********************************


T1      SUN VALLEY PARKWAY NORTH FIS. CONTRACT:FCDMC NO.90-04     FILE:WASH6-2
T2      100-YEAR WATER SURFACE PROFILE                    A-N WEST INC. PHX.AZ.
T3      WASH NO. 6  100-YEAR PROFILE                    DATE:7\1\91;REV.8\5\91

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      0        2                   0     .0071                                    1435.25

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

      1                 -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     38        43         1         2        26        39        21        22        27        28
     53        54         0        38        13        14        15        55        26        56
     63         1        51         4        42        57         0        38        39        33
      3        10        11        12         5         7         8        16        17        18
      0       200

NC    .049      .049      .042        .1        .3
QT       2      1408      1408
ET                         9.1                                                    9899.88    10157.49
```

FLOODWAY MODEL USING FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
PREVIOUS ANALYSIS BY EQUAL CONVEYANCE REDUCTION METHOD (METHOD 4).
STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
CONFLUENCE WITH TRILBY WASH.
CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
BEARDSLEY ROAD EXTENDED CROSSES AT THIS SECTION (NO ROAD CURRENTLY)

X1	.2538	89	9974.2	9990.7	0	0	0			
GR	1435.7	9468.0	1434.5	9477.8	1434.1	9484.7	1433.9	9489.8	1434.5	9495.9
GR	1434.8	9503.9	1435.1	9513.6	1435.0	9521.1	1435.2	9527.6	1435.1	9538.1
GR	1434.7	9598.7	1434.9	9611.1	1434.9	9623.9	1434.9	9631.3	1434.8	9645.5
GR	1434.6	9655.6	1434.5	9666.3	1434.5	9682.7	1434.7	9701.3	1434.8	9712.9
GR	1434.2	9791.8	1434.4	9803.2	1434.4	9814.9	1434.6	9828.0	1434.6	9840.1
GR	1434.6	9848.5	1434.8	9857.3	1434.8	9867.9	1434.7	9876.7	1434.7	9886.0

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GR	1434.8	9938.9	1434.7	9947.9	1434.7	9955.5	1434.5	9965.3	1434.1	9974.2
GR	1433.7	9982.0	1433.7	9985.9	1434.3	9990.7	1434.7	9996.7	1434.7	10000.0
GR	1435.1	10033.4	1435.1	10045.5	1435.1	10055.4	1435.0	10066.2	1434.7	10077.5
GR	1434.3	10084.1	1433.8	10088.6	1434.4	10092.9	1434.7	10103.4	1434.7	10115.6
GR	1435.1	10184.8	1435.3	10198.5	1435.3	10211.2	1434.7	10223.9	1434.2	10231.9
GR	1433.1	10272.6	1433.0	10278.9	1433.9	10285.4	1434.3	10293.7	1434.5	10305.5
GR	1434.8	10362.7	1434.6	10370.8	1434.1	10378.0	1433.4	10382.7	1433.8	10386.9
GR	1434.3	10392.7	1434.4	10401.3	1434.6	10412.4	1434.8	10426.7	1434.8	10438.4
GR	1435.1	10449.2	1434.9	10457.7	1435.0	10466.7	1434.9	10476.6	1434.8	10485.6
GR	1434.9	10495.4	1435.0	10509.0	1435.3	10518.9	1435.8	10527.7	1435.7	10538.5
GR	1436.6	10710.9	1436.4	10721.7	1436.4	10732.3	1436.5	10747.6	1436.6	10760.2
GR	1436.8	10773.2	1437.0	10785.1	1437.0	10797.3	1437.0	10804.1		
ET		7.1	9.1				9889.3	10790.5	9890	10100

MOUNTBATTEN ROAD (211TH AVE.) EXTENDED CROSSES 210 FT. UPSTREAM OF
THIS SECTION (NO ROAD CURRENTLY)
ENCROACHMENTS (ET CARD) APPLIED FROM SEC. .3655 TO .7367 TO BLOCK
OUT INEFFECTIVE FLOW IN LEFT OVERBANK (LOOKING DOWNSTREAM) BEYOND RIDGE.

X1	0.3655	95	9983.2	9997.6	600	600	620			
GR	1439.6	9069.3	1439.0	9086.8	1439.1	9114.3	1438.8	9130.1	1438.8	9141.0
GR	1438.6	9222.0	1438.5	9242.1	1438.4	9267.4	1438.5	9302.0	1438.5	9344.4
GR	1438.4	9480.1	1438.8	9524.3	1439.1	9552.2	1439.5	9568.6	1439.2	9575.3
GR	1438.6	9631.7	1438.6	9636.2	1439.0	9641.3	1439.4	9648.1	1439.5	9653.9
GR	1440.0	9725.6	1440.1	9736.4	1440.2	9747.8	1440.2	9758.6	1440.2	9772.3
GR	1439.4	9827.3	1439.7	9836.8	1440.0	9844.9	1440.1	9852.8	1439.9	9860.8
GR	1439.8	9866.7	1440.0	9872.4	1440.1	9880.2	1440.4	9889.3	1439.8	9895.4
GR	1440.3	9903.5	1440.2	9913.8	1440.1	9922.6	1440.1	9928.2	1440.0	9935.8
GR	1439.4	9942.5	1439.7	9951.9	1439.8	9956.1	1439.3	9964.4	1439.2	9970.4
GR	1439.4	9975.8	1439.4	9980.1	1439.4	9983.2	1438.3	9988.2	1437.4	9991.7
GR	1437.9	9994.2	1439.2	9997.6	1439.2	10000.0	1438.1	10000.1	1439.2	10003.9
GR	1439.2	10007.9	1439.1	10013.0	1439.1	10022.3	1439.6	10030.4	1439.7	10038.9
GR	1439.8	10096.6	1440.2	10110.4	1440.3	10119.6	1440.5	10126.7	1440.2	10133.4
GR	1439.9	10139.8	1440.1	10147.5	1439.7	10156.4	1439.7	10165.0	1439.8	10175.3
GR	1439.8	10185.3	1439.7	10194.7	1439.7	10204.1	1439.6	10215.7	1439.6	10223.4
GR	1439.7	10308.8	1439.7	10318.4	1439.4	10323.8	1438.6	10329.1	1439.4	10334.6
GR	1438.8	10337.5	1437.2	10342.6	1437.0	10345.4	1438.2	10349.5	1439.0	10354.6
GR	1440.1	10524.3	1440.2	10538.0	1440.3	10551.6	1440.4	10563.1	1440.4	10577.2
GR	1441.6	10756.7	1441.9	10764.0	1441.9	10768.8	1441.8	10779.3	1441.8	10790.5
ET		7.1	9.1				9911.0	10552.1	9980.0	10091.5
X1	0.4981	81	10000.0	10023.4	700	700	720			
GR	1448.4	9585.8	1448.5	9591.7	1449.1	9600.0	1449.2	9609.0	1449.0	9615.6
GR	1448.8	9624.7	1448.3	9635.6	1448.3	9642.9	1448.2	9649.9	1448.0	9660.0
GR	1447.5	9669.5	1446.9	9681.7	1447.0	9689.6	1446.9	9698.6	1446.7	9711.2
GR	1446.4	9722.0	1446.4	9734.0	1446.4	9746.4	1446.1	9757.7	1446.0	9770.2
GR	1446.1	9781.7	1446.2	9791.7	1446.3	9800.8	1446.2	9807.8	1446.2	9814.0
GR	1446.0	9827.0	1446.0	9834.1	1446.1	9846.5	1446.1	9861.0	1446.1	9878.4

GR	1446.3	9895.2	1446.6	9903.8	1447.1	9911.0	1446.2	9917.7	1445.8	9926.9
GR	1445.9	9966.9	1445.5	9971.6	1445.9	9975.8	1446.1	9984.0	1446.2	9989.8
GR	1446.3	9998.2	1446.2	10000.0	1446.2	10000.1	1445.2	10005.1	1444.8	10011.4
GR	1445.0	10013.8	1445.7	10017.8	1445.9	10023.4	1445.7	10030.3	1445.4	10037.4
GR	1445.4	10046.1	1445.5	10055.2	1445.4	10063.1	1445.1	10076.9	1445.3	10086.1
GR	1445.3	10098.0	1446.0	10111.7	1446.1	10122.7	1446.1	10135.9	1446.3	10147.4
GR	1446.5	10158.1	1446.5	10167.4	1446.5	10178.5	1446.5	10188.4	1446.5	10197.3

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GR	1446.9	10206.8	1446.9	10213.4	1447.1	10219.8	1447.0	10229.3	1446.4	10240.3
GR	1446.2	10373.1	1446.1	10386.4	1446.2	10399.9	1446.7	10414.9	1447.0	10438.0
GR	1447.4	10464.6	1447.8	10490.3	1447.8	10506.2	1448.0	10524.6	1448.6	10543.8
GR	1448.6	10552.1								
ET		7.1	9.1				9502.0	10239.2	9905.0	10075
X1	0.6174	70	10008.8	10033.0	640	600	650			
GR	1456.0	9502.0	1455.8	9523.9	1455.7	9546.9	1455.2	9580.3	1455.0	9604.9
GR	1454.2	9645.7	1454.1	9674.8	1453.8	9701.1	1454.0	9718.4	1453.0	9735.3
GR	1452.8	9753.5	1451.6	9770.1	1450.8	9782.7	1450.8	9795.7	1450.9	9816.1
GR	1450.9	9893.3	1451.0	9906.9	1450.8	9920.9	1450.8	9931.0	1452.0	9943.8
GR	1451.4	9958.0	1452.0	9972.5	1451.5	9981.4	1451.2	9988.3	1450.5	9993.8
GR	1451.4	9999.1	1451.6	10000.0	1451.1	10000.1	1451.6	10008.8	1451.5	10021.0
GR	1450.1	10025.4	1450.1	10028.3	1451.5	10033.0	1451.6	10039.2	1450.8	10046.0
GR	1450.8	10049.9	1450.7	10053.8	1451.1	10060.3	1451.3	10072.8	1451.5	10089.0
GR	1452.0	10156.8	1452.4	10170.2	1452.4	10185.8	1452.8	10199.1	1452.9	10214.2
GR	1453.0	10239.2	1452.8	10257.9	1452.6	10273.8	1452.5	10287.9	1452.3	10306.7
GR	1452.0	10323.6	1451.8	10340.4	1451.6	10358.3	1451.5	10372.2	1451.8	10385.9
GR	1451.8	10395.8	1451.8	10407.7	1451.9	10412.8	1451.6	10421.9	1451.8	10439.3
GR	1451.8	10456.6	1452.0	10477.9	1453.6	10496.7	1453.4	10516.5	1453.7	10534.8
GR	1453.8	10557.7	1453.8	10581.1	1454.0	10600.2	1454.5	10615.5	1454.4	10627.6
ET		7.1	9.1				9739.8	10040.2	9900	10020
X1	0.7367	75	9955.1	9979.6	670	600	650			
GR	1460.9	9739.8	1461.3	9756.3	1461.4	9772.4	1461.3	9787.0	1460.7	9800.6
GR	1460.0	9815.5	1459.5	9826.2	1459.6	9836.6	1459.1	9848.8	1458.3	9863.9
GR	1456.9	9878.3	1457.0	9886.2	1457.0	9896.2	1456.2	9902.4	1455.0	9908.0
GR	1456.2	9912.5	1455.9	9915.1	1455.6	9918.9	1455.8	9922.5	1456.0	9930.4
GR	1457.3	9940.2	1457.3	9949.5	1457.0	9955.1	1455.6	9965.6	1455.3	9972.9
GR	1456.2	9979.6	1456.3	9985.6	1456.3	9989.9	1457.6	9993.6	1457.6	9999.0
GR	1457.0	10000.0	1457.4	10000.1	1456.6	10004.4	1456.8	10009.0	1457.7	10016.6
GR	1458.4	10023.6	1458.9	10030.9	1459.1	10040.2	1458.7	10051.9	1458.0	10064.9
GR	1456.9	10076.4	1455.9	10090.3	1455.7	10097.7	1455.8	10104.9	1455.9	10111.3
GR	1456.2	10121.9	1456.3	10135.9	1456.5	10147.8	1456.1	10158.6	1456.2	10170.7
GR	1456.1	10181.1	1456.2	10190.9	1456.1	10202.3	1456.0	10215.0	1455.6	10223.6
GR	1456.2	10234.1	1456.5	10247.3	1456.9	10259.5	1457.3	10270.1	1456.6	10275.6
GR	1456.4	10280.1	1457.1	10286.7	1457.4	10294.3	1457.4	10300.0	1457.4	10308.3
GR	1457.2	10391.4	1457.5	10400.7	1457.5	10414.0	1457.7	10440.2	1458.4	10471.0
GR	1458.5	10501.6	1458.5	10522.4	1459.6	10550.4	1460.3	10571.1	1460.3	10571.2
ET			9.1						9780	9991.6
X1	0.8485	92	9970.6	9991.6	600	590	610			
GR	1465.9	9392.3	1465.8	9408.6	1465.7	9418.7	1465.1	9428.2	1464.7	9436.0
GR	1464.2	9453.4	1464.0	9469.3	1463.8	9488.1	1463.8	9505.6	1463.8	9522.8
GR	1463.0	9535.2	1462.8	9543.9	1463.2	9553.2	1462.2	9562.6	1462.2	9571.0
GR	1463.1	9666.6	1462.7	9676.7	1463.1	9689.6	1463.0	9700.8	1462.8	9713.4
GR	1462.1	9727.2	1463.0	9736.8	1463.0	9747.6	1463.4	9760.5	1463.2	9773.2
GR	1463.1	9787.5	1462.6	9801.7	1463.2	9808.3	1463.3	9817.5	1462.9	9823.9
GR	1461.9	9827.8	1463.4	9832.0	1463.4	9838.9	1463.1	9849.2	1462.5	9855.9
GR	1463.4	9861.5	1463.2	9870.7	1463.0	9882.3	1463.0	9891.4	1463.1	9901.2
GR	1462.9	9907.7	1463.2	9917.4	1463.3	9928.7	1463.2	9940.5	1462.8	9952.4
GR	1463.0	9960.4	1463.2	9970.6	1462.5	9976.6	1460.5	9983.7	1461.1	9987.5
GR	1463.3	9991.6	1463.0	9999.5	1463.0	10000.0	1462.8	10000.1	1463.0	10006.0
GR	1463.3	10011.1	1463.0	10017.4	1462.6	10022.8	1462.7	10031.3	1462.7	10038.9

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GR   1463.1   10045.9   1463.5   10052.6   1462.9   10057.7   1462.8   10062.9   1462.9   10068.6
GR   1463.5   10073.5   1463.2   10081.3   1462.5   10090.2   1462.0   10098.8   1461.7   10105.0
GR   1462.1   10112.8   1463.2   10122.4   1463.6   10131.5   1463.4   10142.0   1463.3   10150.5
GR   1463.5   10159.9   1463.8   10172.6   1464.3   10183.9   1464.6   10200.4   1464.9   10210.2
GR   1464.5   10221.0   1465.0   10231.9   1464.5   10240.2   1464.5   10247.4   1465.5   10256.4
GR   1465.5   10266.8   1465.5   10280.2   1465.0   10294.0   1465.0   10308.9   1465.2   10326.2
GR   1465.3   10344.8   1465.3   10344.9

ET              7.1       9.1                                 9680.5   10441.1   9841.6   9969.9
      ENCROACHMENT (ET CARD) APPLIED FROM SEC. .9498 TO 1.2254 TO BLOCK
      OUT INEFFECTIVE FLOW IN LEFT (LOOKING DOWNSTREAM) OVERBANK BEYOND RIDGE.
X1   0.9498      90      9951.7   9969.9    530       530       560
GR   1472.9   9152.5   1472.4   9166.2   1472.0   9178.6   1471.8   9190.0   1471.8   9199.2
GR   1471.7   9207.0   1471.2   9222.7   1470.9   9243.9   1470.4   9264.3   1470.4   9273.6
GR   1471.1   9283.5   1471.0   9289.7   1470.4   9299.7   1470.8   9305.9   1470.6   9309.6
GR   1469.4   9317.5   1470.7   9324.1   1471.2   9335.0   1471.2   9345.3   1471.0   9357.4
GR   1470.0   9366.9   1469.4   9376.9   1470.1   9381.1   1470.2   9386.3   1470.6   9390.8
GR   1471.1   9396.7   1471.4   9402.0   1471.3   9419.6   1471.3   9436.8   1470.8   9449.9
GR   1470.6   9463.0   1470.0   9484.5   1469.8   9501.0   1469.8   9518.3   1469.1   9533.0
GR   1469.1   9540.7   1469.6   9550.3   1469.4   9558.2   1466.2   9568.7   1468.2   9573.6
GR   1468.5   9579.1   1467.9   9582.8   1467.9   9585.7   1469.2   9588.1   1469.2   9592.5
GR   1469.4   9662.7   1469.7   9680.5   1469.0   9701.7   1468.3   9716.5   1468.0   9727.8
GR   1467.8   9740.1   1467.4   9754.5   1467.1   9773.1   1466.8   9787.6   1466.8   9809.1
GR   1467.6   9912.6   1467.2   9918.4   1467.4   9922.8   1467.5   9932.8   1467.7   9944.9
GR   1468.5   9951.7   1467.2   9958.9   1467.0   9964.3   1467.8   9969.9   1468.0   9976.1
GR   1467.9   9984.2   1467.8   9990.8   1468.4   9995.9   1469.0   10000.0  1468.4   10000.1
GR   1468.4   10000.2  1469.4   10006.2  1469.4   10011.7  1468.7   10018.5  1469.0   10025.7
GR   1468.3   10082.9  1468.7   10095.0  1469.0   10110.4  1469.1   10125.8  1469.5   10143.3
GR   1470.5   10314.2  1471.1   10338.8  1471.7   10365.4  1471.9   10387.1  1472.0   10401.9
GR   1472.0   10408.8  1471.6   10413.2  1472.4   10419.2  1472.4   10430.5  1472.5   10441.1

ET              7.1       9.1                                 9860.4   10339.6   9989.4   10088.8
X1   1.0417      95      9989.4   10009.9   490       490       515
GR   1477.3   8769.2   1477.3   8795.3   1476.8   8821.9   1476.8   8845.8   1476.4   8862.4
GR   1476.1   8878.1   1476.1   8894.2   1476.1   8912.9   1475.9   8939.0   1475.0   8949.9
GR   1475.5   8959.8   1475.9   8973.1   1476.2   8986.2   1476.4   9001.4   1476.3   9011.7
GR   1475.8   9023.0   1475.3   9031.4   1474.3   9038.4   1474.2   9044.9   1475.5   9049.1
GR   1475.6   9056.0   1476.0   9062.2   1475.7   9071.6   1475.8   9080.4   1475.6   9090.6
GR   1474.9   9095.9   1473.8   9101.8   1475.0   9105.6   1475.6   9113.2   1475.9   9122.8
GR   1476.1   9134.8   1476.3   9146.7   1476.0   9158.3   1476.5   9177.7   1476.7   9193.8
GR   1475.8   9576.7   1476.0   9611.7   1476.7   9654.2   1476.8   9677.0   1476.9   9692.8
GR   1477.0   9714.1   1477.0   9733.9   1476.0   9751.3   1475.9   9768.9   1475.2   9783.8
GR   1474.9   9798.7   1474.3   9814.5   1474.6   9823.6   1475.3   9830.3   1475.5   9838.8
GR   1475.9   9849.5   1476.4   9860.4   1476.0   9873.8   1475.9   9887.2   1475.9   9898.7
GR   1475.2   9911.1   1475.2   9923.3   1475.2   9937.1   1474.0   9949.5   1473.9   9963.9
GR   1473.3   9977.7   1471.8   9989.4   1471.1   9994.3   1470.9   10000.0  1470.5   10000.1
GR   1470.5   10000.2  1471.6   10004.5  1472.6   10009.9  1473.1   10014.6  1473.4   10024.3
GR   1473.3   10088.3  1473.0   10097.8  1471.6   10107.7  1471.3   10111.6  1471.8   10117.7
GR   1473.5   10124.1  1473.5   10131.9  1473.7   10144.8  1473.8   10151.6  1473.9   10159.2
GR   1474.1   10169.0  1473.7   10181.0  1474.2   10191.3  1474.2   10209.3  1474.5   10227.6
GR   1475.0   10244.2  1475.5   10260.9  1476.2   10275.1  1477.0   10283.3  1476.1   10292.5
GR   1476.0   10298.7  1476.6   10306.2  1477.3   10316.2  1477.6   10323.5  1477.9   10339.6
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ET              7.1       9.1                                 9788.2   10086.5   9980.0   10038.0
X1   1.097      95      9996.8   10009.9   280       305       290
GR   1479.2   9024.6   1480.0   9039.0   1480.2   9043.3   1480.2   9056.9   1480.0   9073.7
GR   1479.2   9090.2   1478.9   9098.3   1479.1   9112.3   1479.0   9129.7   1478.8   9146.0
GR   1478.8   9164.6   1479.0   9186.3   1479.2   9205.6   1479.3   9224.6   1479.5   9245.7
GR   1479.6   9262.3   1479.5   9285.9   1479.3   9305.7   1479.0   9324.6   1478.8   9342.1
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GR   1478.6    9513.8    1478.5    9530.0    1478.7    9543.7    1479.1    9562.2    1479.7    9578.0
GR   1479.6    9664.9    1479.7    9680.9    1479.9    9701.7    1480.0    9736.2    1480.8    9788.2
GR   1480.1    9812.6    1479.3    9829.1    1478.7    9845.4    1477.8    9863.8    1479.1    9882.6
GR   1478.8    9895.6    1478.3    9905.0    1478.4    9915.4    1477.9    9925.7    1477.0    9937.4
GR   1476.0    9948.1    1476.6    9955.4    1476.9    9962.3    1476.9    9970.6    1476.1    9980.6
GR   1475.5    9988.9    1475.8    9996.8    1475.6   10000.0    1474.8   10000.1    1474.9   10004.4
GR   1475.8   10009.9    1476.3   10015.1    1476.4   10021.3    1476.4   10029.9    1476.3   10038.2
GR   1477.1   10045.4    1478.8   10053.5    1479.6   10063.6    1480.9   10071.8    1482.1   10077.0
GR   1482.1   10086.5    1481.3   10095.3    1480.9   10104.8    1480.3   10117.6    1479.3   10130.1
GR   1478.0   10143.3    1477.9   10156.0    1477.9   10167.7    1477.6   10179.6    1477.8   10191.1
GR   1478.0   10260.7    1479.1   10274.8    1479.6   10292.0    1480.0   10306.1    1480.2   10320.8
GR   1480.5   10335.8    1480.5   10355.2    1480.0   10374.4    1478.8   10393.3    1478.0   10408.8
GR   1477.2   10421.0    1477.2   10431.4    1478.0   10440.0    1478.3   10447.7    1478.0   10458.8
GR   1479.8   10542.8    1479.8   10557.7    1479.7   10575.8    1479.6   10582.9    1479.9   10591.9
GR   1480.6   10602.2    1481.0   10612.9    1481.0   10623.5    1480.8   10631.0    1481.1   10636.9

QT       2       925       925
ET               7.1       9.1                                   9859.1   10170.0     10015     10120
X1   1.1344        75   10028.9   10042.3       190       215       205
GR   1480.8    9013.7    1480.9    9035.0    1481.0    9058.2    1481.0    9072.1    1480.8    9085.0
GR   1480.3    9097.2    1480.2    9102.6    1480.2    9117.5    1479.7    9129.0    1480.0    9141.1
GR   1480.1    9202.7    1480.2    9216.7    1480.4    9232.3    1480.4    9245.4    1480.4    9262.0
GR   1480.6    9279.9    1481.1    9297.4    1481.0    9312.1    1480.8    9325.3    1481.1    9340.2
GR   1480.8    9355.6    1480.6    9370.4    1480.0    9381.7    1480.0    9394.5    1480.1    9408.1
GR   1480.3    9421.9    1480.3    9437.0    1480.4    9448.8    1480.5    9460.8    1480.4    9472.9
GR   1480.5    9494.4    1480.3    9515.3    1480.2    9549.1    1480.2    9587.2    1480.3    9609.0
GR   1480.5    9632.6    1480.5    9650.1    1480.3    9666.4    1480.7    9693.1    1481.1    9713.4
GR   1481.3    9735.2    1481.4    9759.3    1481.9    9790.1    1482.3    9832.8    1482.4    9859.1
GR   1482.3    9876.4    1482.0    9899.2    1481.2    9916.4    1480.4    9927.3    1480.0    9930.5
GR   1479.2    9937.3    1480.0    9942.2    1480.0    9947.3    1480.0    9952.4    1479.8    9961.0
GR   1479.5    9972.7    1478.8    9985.0    1478.4    9998.1    1478.3   10000.0    1478.5   10000.1
GR   1478.7   10008.5    1478.6   10019.7    1477.9   10028.9    1476.6   10037.3    1477.0   10042.3
GR   1478.7   10050.1    1478.8   10061.3    1478.8   10076.0    1478.6   10089.6    1478.6   10100.2
GR   1478.6   10113.3    1478.8   10124.4    1478.9   10135.2    1480.0     10150    1482.0     10170

ET               7.1       9.1                                   9914.3   10202.0    9970.7   10025.8
X1   1.1780        75    9978.2   10007.7       230       250       265
GR   1483.5    9129.1    1483.5    9141.4    1483.7    9154.0    1483.4    9160.9    1483.5    9172.5
GR   1483.3    9184.8    1484.0    9198.6    1483.1    9212.5    1482.9    9226.1    1482.6    9235.1
GR   1482.5    9313.7    1482.4    9329.3    1482.3    9342.4    1482.6    9357.1    1483.3    9369.0
GR   1483.5    9382.1    1483.5    9395.5    1483.8    9410.0    1483.9    9420.9    1483.6    9433.6
GR   1482.8    9513.4    1483.0    9527.0    1483.1    9536.4    1482.8    9545.7    1482.8    9557.3
GR   1483.1    9572.3    1483.1    9581.2    1482.8    9594.8    1482.9    9607.8    1482.8    9621.5
GR   1482.6    9636.2    1482.6    9648.3    1482.7    9660.4    1482.6    9670.2    1482.7    9681.9
GR   1482.8    9693.1    1483.0    9705.0    1483.1    9720.0    1483.5    9739.2    1483.8    9758.3
GR   1483.6    9771.5    1483.8    9784.3    1483.8    9799.0    1483.5    9816.9    1484.0    9838.8
GR   1484.4    9859.5    1485.0    9892.2    1485.3    9914.3    1484.0    9931.6    1483.8    9947.9
1
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GR   1483.3    9955.3    1483.3    9963.9    1482.0    9968.1    1481.9    9978.2    1480.3    9989.8
GR   1480.0    9994.7    1480.7   10000.0    1480.6   10000.1    1480.6   10001.0    1482.0   10007.7
GR   1482.1   10018.6    1482.1   10030.8    1481.2   10048.2    1481.2   10057.0    1481.5   10063.1
GR   1481.3   10073.8    1480.2   10085.9    1481.5   10093.7    1482.1   10111.3    1482.5   10122.6
GR   1482.8   10130.0    1484.2   10138.9    1487.2   10154.1    1487.4   10160.8    1488.2   10202.0

ET               7.1       9.1                                   9798.3   10145.0    9910.0   10015.1
        ENCROACHMENT (ET CARD) APPLIED TO BLOCK OUT INEFFECTIVE FLOW OUTSIDE
        4:1 FLARE FROM CULVERT OUTLET.
X1   1.2254        70    9985.2   10015.1       260       220       260
GR   1486.5    9296.7    1486.4    9306.9    1486.2    9313.2    1486.3    9324.1    1485.9    9337.2
GR   1485.8    9349.0    1485.9    9364.4    1486.2    9380.3    1486.0    9390.0    1486.0    9402.6
GR   1486.1    9417.5    1485.8    9426.7    1485.9    9437.0    1485.9    9446.7    1485.8    9459.8
GR   1485.7    9470.8    1485.5    9483.6    1485.6    9496.9    1485.6    9511.0    1485.8    9525.4
GR   1486.0    9539.3    1486.2    9552.9    1486.6    9567.0    1487.1    9576.5    1486.8    9585.0
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GR   1486.9     9600.9     1487.0     9612.4     1487.0     9623.8     1486.8     9636.4     1486.4     9649.6
GR   1486.5     9659.3     1486.5     9669.9     1486.4     9679.1     1486.3     9689.0     1486.3     9704.2
GR   1487.4     9798.3     1487.2     9812.7     1487.0     9827.4     1486.6     9837.5     1486.2     9846.8
GR   1486.0     9853.2     1485.2     9870.5     1484.8     9876.6     1485.0     9885.2     1484.7     9892.6
GR   1485.3     9899.1     1485.2     9904.0     1484.8     9913.9     1485.1     9921.4     1485.1     9933.4
GR   1485.1     9942.4     1485.3     9952.6     1485.4     9972.6     1484.5     9985.2     1483.9     9995.7
GR   1483.7    10000.0     1483.8    10000.1     1483.6    10007.0     1484.2    10015.1     1484.2    10026.3
GR   1484.2    10035.4     1485.0    10043.7     1487.5    10049.0     1488.1    10054.9     1488.5    10065.1
GR   1489.5    10078.1     1489.4    10090.2     1489.4    10097.4     1489.9    10126.6     1490.1    10145.0

NC    .035       .035       .035        .3         .5
        BEGIN SUN VALLEY PARKWAY CULVERTS (4- 10' X 4' RCBS  - STRUC. NO.31)
X1   1.2368         4     9978.5    10021.5         60         60         60
X3      10                                                                 1490.5     1490.5
GR   1490.5     9978.5     1486.0     9978.5     1486.0    10021.5     1490.5    10021.5

QT       2       1094       1094
NC    .012       .012       .012
SC   4.012         .2       2.63          0          4         10        170       12.3     1486.6     1486.0
        END CULVERTS (STRUC. #31).    NO WEIR FLOW OVER ROAD EXPECTED, BUT
        FLOW OVER WEIR TO RIGHT OF CULVERT IS EXPECTED. HOWEVER THIS WEIR
        FLOW WILL NOT IMMEDIATELY RETURN TO CHANNEL.
X1   1.2690         0          0          0        170        170        170                    .6
X2                              2     1490.6     1490.0
X3      10                                                                 1491.5     1491.5
BT      10      9900     1494.9                   10000     1493.8               10000.1     1493.3
BT   10040    1492.5               10048.1     1492.1                 10055     1491.0                 10071
BT   1491.0               10071.1     1490.0               10176.1      1490                  10188     1491.0
BT       0

NC    .035       .035       .035
ET                 7.1        9.1                                       9968      10040      9968      10040
        ENCROACHMENT APPLIED LIMITING FLOW TO ARMORED WEIR LEVEE WITH TOP
        OF LEVEE EL.= 1490.0.
X1   1.2822         4       9968      10040         70         70         70
GR    1490       9968       1488       9976       1488      10025       1490      10040
1
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NC    .049       .049       .042         .1         .3
QT       2       1408       1408
ET                 7.1        9.1                                     9788.2    10086.5      9980.0    10038.0
        BEGIN TRIBUTARY 6A.  REPEAT SECTION 1.097.
X1   -1.097        95     9996.8    10009.9        280        305        290
GR   1479.2     9024.6     1480.0     9039.0     1480.2     9043.3     1480.2     9056.9     1480.0     9073.7
GR   1479.2     9090.2     1478.9     9098.3     1479.1     9112.3     1479.0     9129.7     1478.8     9146.0
GR   1478.8     9164.6     1479.0     9186.3     1479.2     9205.6     1479.3     9224.6     1479.5     9245.7
GR   1479.6     9262.3     1479.5     9285.9     1479.3     9305.7     1479.0     9324.6     1478.8     9342.1
GR   1478.6     9513.8     1478.5     9530.0     1478.7     9545.7     1479.1     9562.2     1479.7     9576.0
GR   1479.6     9664.9     1479.7     9680.9     1479.9     9701.7     1480.0     9736.2     1480.8     9788.2
GR   1480.1     9812.6     1479.3     9829.1     1478.7     9845.4     1477.8     9863.8     1479.1     9882.6
GR   1478.8     9895.6     1478.3     9905.0     1478.4     9915.4     1477.9     9925.7     1477.0     9937.4
GR   1476.0     9948.1     1476.6     9955.4     1476.9     9962.3     1476.9     9970.6     1476.1     9980.6
GR   1475.5     9988.9     1475.8     9996.8     1475.6    10000.0     1474.8    10000.1     1474.9    10004.4
GR   1475.8    10009.9     1476.3    10015.1     1476.4    10021.3     1476.4    10029.9     1476.3    10038.2
GR   1477.1    10045.4     1478.8    10053.5     1479.6    10063.6     1480.9    10071.8     1482.1    10077.0
GR   1482.1    10086.5     1481.3    10095.3     1480.9    10104.8     1480.3    10117.6     1479.3    10130.1
GR   1478.0    10143.3     1477.9    10156.0     1477.9    10167.7     1477.6    10179.6     1477.8    10191.1
GR   1478.0    10260.7     1479.1    10274.8     1479.6    10292.0     1480.0    10306.1     1480.2    10320.8
GR   1480.5    10335.8     1480.5    10355.2     1480.0    10374.4     1478.8    10393.3     1478.0    10408.8
GR   1477.2    10421.0     1477.2    10431.4     1478.0    10440.0     1478.3    10447.7     1478.0    10458.8
GR   1479.8    10542.8     1479.8    10557.7     1479.7    10575.8     1479.6    10582.9     1479.9    10591.9
GR   1480.6    10602.2     1481.0    10612.9     1481.0    10623.5     1480.8    10631.0     1481.1    10636.9
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BT        2       412       412
ET                7.1       9.1                                    10160.0     10260.0      10165      10245
        ADD 10 TO CROSS-SECTION I.D. NUMBER FOR TRIB 6A.
        STA. 10210= BASELINE TRIB. 6A.
        ENCROACHMENT (ET CARD) APPLIED AT SEC.11.139 TO LIMIT INEFFECTIVE TO
        WITHIN 4:1 FLARE FROM CULVERT OUTLET>
X1   11.139        18   10186.5   10216.9       235       175       225
GR   1484.0   10100.0    1482.0   10115.0    1480.0   10125.2    1478.7   10145.8    1477.7   10155.3
GR   1477.1   10163.5    1476.8   10174.3    1476.0   10186.5    1475.5   10194.2    1475.7   10205.0
GR   1476.1   10216.8    1476.8   10227.0    1477.8   10236.7    1478.7   10248.3    1479.9   10260.5
GR   1481.0   10271.4    1480.8   10284.0    1481.0   10284.1

NC     .035      .035      .035        .3         .5
        BEGIN SUN VALLEY PARKWAY CULVERTS ( 6- 12' X 6' RCBS. -STRUC. NO. 32)
X1   11.148         4    9961.5   10038.5        45        45        45
X3       10                                                              1484.9    1484.9
GR   1484.9    9961.5    1478.4    9961.5    1478.4   10038.5    1484.9   10038.5

NC     .012      .012      .012
SC    6.012        .2       2.9         0         6        12       144      12.3    1479.0    1478.4
        END CULVERTS (STRUC. #32).  NO WEIR FLOW OVER ROAD EXPECTED.
X1   11.175         0         0         0       144       144       144                .6
X2                             2      1485      1484
X3       10                                                              1485.5    1485.5
BT       10      9902    1489.3                10000    1488.8            10131.9    1488.2
BT    10132    1487.7              10172.1    1486.9              10180.1    1486.5              10191
BT   1484.0               10196      1484                10198    1484.5               10248      1485
BT        0
1
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NC     .035      .035      .035
ET                7.1       9.1                                     9943      10065       9943      10065
        ENCROACHMENT (ET CARD) APPLIED TO FLOODPLAIN\FLOODWAY TO LIMIT FLOW
        ON LEFT SIDE WITHIN ARMORED WEIR LEVEE AND ON RIGHT SIDE WITHIN 1:1
        FLARE FROM CULVERT INLET.
X1   11.180         8      9950     10048        30        30        30
GR    1484      9943      1481      9950      1480      9960      1480     10040      1481     10048
GR    1482     10055      1483     10080      1484     10125
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*PROF 1

CCHV=     .100 CEHV=     .300
*SECNO  .254

3265 DIVIDED FLOW

        FLOODWAY MODEL USING FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
        PREVIOUS ANALYSIS BY EQUAL CONVEYANCE REDUCTION METHOD (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH TRILBY WASH.
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        BEARDSLEY ROAD EXTENDED CROSSES AT THIS SECTION (NO ROAD CURRENTLY)
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     .254      2.25   1435.25       .00   1435.25   1435.33       .08       .00       .00   1434.10
   1408.0     549.0      83.1     775.9     287.8      22.6     321.2        .0        .0   1434.30
      .00      1.91      3.68      2.42      .049      .042      .049      .000   1433.00   9471.67
  .007155        0.        0.        0.         0         0         0       .00   1028.39  10517.25


*SECNO  .366

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9889.3   10790.5  TYPE=      1  TARGET=      901.200
       MOUNTBATTEN ROAD (211TH AVE.) EXTENDED CROSSES 210 FT. UPSTREAM OF
       THIS SECTION (NO ROAD CURRENTLY)
       ENCROACHMENTS (ET CARD) APPLIED FROM SEC. .3655 TO .7367 TO BLOCK
       OUT INEFFECTIVE FLOW IN LEFT OVERBANK (LOOKING DOWNSTREAM) BEYOND RIDGE.
     .366      3.33   1440.33       .00       .00   1440.49       .16      5.13       .02   1439.40
   1408.0     119.4     160.3    1128.2      48.5      28.8     394.5       7.6      11.6   1439.20
      .05      2.46      5.57      2.86      .049      .042      .049      .000   1437.00   9890.05
  .010337      600.      620.      600.         5         0         0       .00    654.43  10554.56


*SECNO  .498

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9911.0   10552.1  TYPE=      1  TARGET=      641.100
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


     .498      2.21   1447.01       .00       .00   1447.16       .15      6.67       .00   1446.20
   1408.0     268.9     170.8     968.4      90.6      37.7     333.3      15.1      21.0   1445.90
     .12      2.97      4.53      2.91      .049      .042      .049      .000   1444.80   9911.69
  .008757      700.      720.      700.         5         0         0       .00    515.05  10438.50


*SECNO  .617

3470 ENCROACHMENT STATIONS=     9502.0   10239.2  TYPE=      1  TARGET=      737.200
     .617      2.25   1452.35       .00       .00   1452.52       .16      5.35       .00   1451.60
   1408.0    1012.8     113.2     282.0     303.8      30.3     106.7      21.6      27.5   1451.50
     .17      3.33      3.73      2.64      .049      .042      .049      .000   1450.10   9759.76
  .008424      640.      650.      600.         4         0         0       .00    408.69  10168.45


*SECNO  .737

3470 ENCROACHMENT STATIONS=     9739.8   10040.2  TYPE=      1  TARGET=      300.400
     .737      3.38   1458.38       .00       .00   1458.83       .45      6.23       .09   1457.00
   1408.0     757.0     411.2     239.7     155.1      61.0      57.2      26.9      31.8   1456.20
     .20      4.88      6.74      4.19      .049      .042      .049      .000   1455.00   9862.30
  .010867      670.      650.      600.         4         0         0       .00    161.15  10023.45


*SECNO  .849
     .849      3.27   1463.77       .00       .00   1463.88       .11      5.02       .03   1463.20
   1408.0     884.3     167.5     356.2     378.8      39.3     141.9      32.6      37.3   1463.30
     .27      2.33      4.26      2.51      .049      .042      .049      .000   1460.50   9523.28
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 .006636      600.      610.      590.        4         0         0       .00    648.01  10171.29


*SECNO  .950

3265 DIVIDED FLOW


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


3470 ENCROACHMENT STATIONS=     9680.5   10441.1  TYPE=      1  TARGET=      760.600
       ENCROACHMENT (ET CARD) APPLIED FROM SEC. .9498 TO 1.2254 TO BLOCK
       OUT INEFFECTIVE FLOW IN LEFT (LOOKING DOWNSTREAM) OVERBANK BEYOND RIDGE.
     .950      2.38   1468.58       .00       .00   1468.86       .28      4.93       .05   1468.50
   1408.0    1273.8      86.3      47.9     295.6      19.8      21.0      38.1      43.2   1467.80
     .30      4.31      4.36      2.28      .049      .042      .049      .000   1466.20   9710.66
  .013789     530.      560.      530.         3         0         0       .00    318.53  10091.25


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


*SECNO 1.042

3470 ENCROACHMENT STATIONS=     9860.4   10339.6  TYPE=      1  TARGET=      479.199
     1.042      3.93   1474.43       .00       .00   1474.86       .43      5.96       .05   1471.80
    1408.0     149.7     463.4     794.9      41.3      62.0     209.9      41.8      46.6   1472.60
       .33      3.63      7.47      3.79      .049      .042      .049      .000   1470.50   9945.07
   .010593      490.      515.      490.         5         0         0       .00    278.21  10223.27


*SECNO 1.097

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9788.2   10086.5  TYPE=      1  TARGET=      298.300
     1.097      3.35   1478.15       .00       .00   1478.86       .70      3.91       .08   1475.80
    1408.0     686.7     344.4     376.8     119.0      37.9      65.6      43.6      48.0   1475.80
       .34      5.77      9.09      5.74      .049      .042      .049      .000   1474.80   9856.41
   .017332      280.      290.      305.         2         0         0       .00    142.77  10050.46


*SECNO 1.134

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9859.1   10170.0  TYPE=      1  TARGET=      310.900
     1.134      3.76   1480.36       .00       .00   1480.51       .15      1.60       .06   1477.90
     925.0     281.8     202.7     440.5     121.1      44.0     174.1      44.9      48.9   1477.00
       .36      2.33      4.61      2.53      .049      .042      .049      .000   1476.60   9927.59
   .003520      190.      205.      215.         3         0         0       .00    226.05  10153.64
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*SECNO 1.178
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9914.3   10202.0  TYPE=      1  TARGET=      287.700
     1.178      2.58   1482.58   1482.58       .00   1483.10       .53      1.75       .11   1481.90
     925.0      20.8     368.1     536.1       6.9      51.4     112.4      46.3      50.0   1482.00
       .37      3.03      7.17      4.77      .049      .042      .049      .000   1480.00   9966.23
   .019888      230.      265.      250.        20        20         0       .00    158.27  10124.51


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


*SECNO 1.225

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


3470 ENCROACHMENT STATIONS=     9798.3   10145.0  TYPE=      1  TARGET=      346.700
       ENCROACHMENT (ET CARD) APPLIED TO BLOCK OUT INEFFECTIVE FLOW OUTSIDE
       4:1 FLARE FROM CULVERT OUTLET.
     1.225      2.46   1486.06       .00       .00   1486.37       .31      3.24       .02   1484.50
     925.0     347.3     359.9     217.7     120.5      63.3      51.1      47.5      50.9   1484.20
       .39      2.88      5.68      4.26      .049      .042      .049      .000   1483.60   9851.20
   .009522      260.      260.      220.         5         0         0       .00    194.75  10045.95


CCHV=     .300 CEHV=     .500
*SECNO 1.237

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1490.50 ELREA=      1490.50

       BEGIN SUN VALLEY PARKWAY CULVERTS (4- 10' X 4' RCBS  - STRUC. NO.31)
     1.237      2.42   1488.42   1488.42       .00   1489.65      1.23       .72       .46   1490.50
     925.0        .0     925.0        .0        .0     103.9        .0      47.7      51.1   1490.50
       .39       .00      8.90       .00      .000      .035      .000      .000   1486.00   9978.50
   .015620       60.       60.       60.        20         5         0       .00     43.00  10021.50



SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    4         .012      .20       2.63      .00       4.00      10.00     170.00    12        3         1486.60   1486.00

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 1.269

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.05
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1491.10	1491.17	1.06	167.	932.	8.560	160.0	1490.00	113.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1491.50 ELREA= 1491.50

END CULVERTS (STRUC. #31). NO WEIR FLOW OVER ROAD EXPECTED, BUT
FLOW OVER WEIR TO RIGHT OF CULVERT IS EXPECTED. HOWEVER THIS WEIR
FLOW WILL NOT IMMEDIATELY RETURN TO CHANNEL.

1.269	2.97	1489.57	.00	.00	1490.70	1.14	1.06	.00	1491.10
1094.0	.0	1094.0	.0	.0	127.8	.0	48.2	51.3	1491.10
.40	.00	8.56	.00	.000	.012	.000	.000	1486.60	9978.50
.001329	170.	170.	170.	4	0	0	.00	43.00	10021.50

#SECNO 1.282
3280 CROSS SECTION 1.28 EXTENDED .24 FEET

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

3470 ENCROACHMENT STATIONS= 9968.0 10040.0 TYPE= 1 TARGET= 72.000
ENCROACHMENT APPLIED LIMITING FLOW TO ARMORED WEIR LEVEE WITH TOP
OF LEVEE EL.= 1490.0.

1.282	2.24	1490.24	1490.24	.00	1491.21	.97	.22	.05	1540.00
1094.0	.0	1094.0	.0	.0	138.3	.0	48.4	51.4	100000.00
.40	.00	7.91	.00	.000	.035	.000	.000	1488.00	9968.00
.014835	70.	70.	70.	20	15	0	.00	72.00	10040.00

CCHV= .100 CEHV= .300
#SECNO -1.097
START TRIB COMP
-1.097 1.097 1478.152

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9788.2 10086.5 TYPE= 1 TARGET= 298.300

BEGIN TRIBUTARY 6A. REPEAT SECTION 1.097.

-1.097	3.35	1478.15	.00	.00	1478.86	.71	.00	.00	1475.80
1408.0	686.1	345.4	376.5	118.1	37.8	65.2	49.6	52.1	1475.80
.41	5.81	9.15	5.77	.049	.042	.049	.000	1474.80	9856.60
.017620	290.	290.	305.	0	0	0	.00	142.20	10050.41

#SECNO 11.139

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.83

3470 ENCROACHMENT STATIONS= 10160.0 10260.0 TYPE= 1 TARGET= 100.000
ADD 10 TO CROSS-SECTION I.D. NUMBER FOR TRIB 6A.
STA. 10210= BASELINE TRIB. 6A.
ENCROACHMENT (ET CARD) APPLIED AT SEC.11.139 TO LIMIT INEFFECTIVE TO
WITHIN 4:1 FLARE FROM CULVERT OUTLET>

11.139	4.19	1479.69	.00	.00	1479.73	.04	.79	.07	1476.00
412.0	101.2	222.4	88.4	78.3	119.1	77.8	50.8	52.7	1476.10
.45	1.29	1.87	1.14	.049	.042	.049	.000	1475.50	10160.00
.000449	235.	225.	175.	4	0	0	.00	98.33	10258.33

CCHV= .300 CEHV= .500
*SECNO 11.148

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .23

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1484.90 ELREA= 1484.90

BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 6' RCBS. -STRUC. NO. 32)

11.148	1.21	1479.61	.00	.00	1479.91	.30	.05	.13	1484.90
412.0	.0	412.0	.0	.0	93.1	.0	51.0	52.8	1484.90
.45	.00	4.42	.00	.000	.035	.000	.000	1478.40	9961.50
.008777	45.	45.	45.	3	0	0	.00	77.00	10038.50

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	6	.012	.20	2.90	.00	6.00	12.00	144.00	12	3	1479.00	1478.40

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 11.175
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1480.583 EGOC = 1480.605 PCWSE= 1479.608 ELTRD= 1484.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.62

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1480.58	1480.60	.69	0.	412.	3.878	432.0	1484.00	0.

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3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1485.50 ELREA=      1485.50

       END CULVERTS (STRUC. #32).  NO WEIR FLOW OVER ROAD EXPECTED.
   11.175      1.37   1480.37      .00      .00   1480.60      .23      .69      .00   1485.50
    412.0       .0     412.0       .0       .0     106.2       .0     51.3     53.0   1485.50
      .46       .00      3.88      .00     .000      .012     .000     .000  1479.00   9961.50
  .000669     144.      144.      144.        2         0        0      .00    77.00  10038.50


#SECNO 11.180
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9943.0   10065.0  TYPE=      1  TARGET=      122.000
       ENCROACHMENT (ET CARD) APPLIED TO FLOODPLAIN\FLOODWAY TO LIMIT FLOW
       ON LEFT SIDE WITHIN ARMORED WEIR LEVEE AND ON RIGHT SIDE WITHIN 1:1
       FLARE FROM CULVERT INLET.
   11.180       .90   1480.90   1480.90      .00   1481.32      .42      .06      .09   1481.00
    412.0       .0     412.0       .0       .0      79.4       .0     51.4     53.1   1481.00
      .46       .00      5.19      .00     .000      .035     .000     .000  1480.00   9950.98
  .019291      30.       30.       30.       20        14        0      .00    96.23  10047.21


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T1      SUN VALLEY PARKWAY NORTH FIS  CONTRACT:FCDMC NO. 90-04
T2      100-YEAR WATER SURFACE PROFILE                    A-N WEST INC. PHX.AZ.
T3      WASH NO.6  100-YR.FLOODWAY

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

    -10         3                           0                                     1436.25

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

    15                  -1

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


 #PROF 2
0

 CCHV=     .100 CEHV=     .300
 #SECNO  .254

 3470 ENCROACHMENT STATIONS=     9899.9   10157.5  TYPE=      1  TARGET=      257.610
        FLOODWAY MODEL USING FIXED ENCROACHMENT METHOD (METHOD 1) BASED ON
        PREVIOUS ANALYSIS BY EQUAL CONVEYANCE REDUCTION METHOD (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM FROM
        CONFLUENCE WITH TRILBY WASH.
        CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        BEARDSLEY ROAD EXTENDED CROSSES AT THIS SECTION (NO ROAD CURRENTLY)
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     .254      3.25   1436.25       .00   1435.25   1436.46       .21       .00       .00   1434.10
   1408.0     400.8     206.6     800.6     116.8      39.1     242.1        .0        .0   1434.30
      .00      3.43      5.29      3.31      .049      .042      .049      .000   1433.00   9899.88
  .007103        0.        0.        0.         0         0         0       .00    257.61  10157.49


*SECNO  .366

3470 ENCROACHMENT STATIONS=     9890.0   10100.0  TYPE=      1  TARGET=      210.000
       MOUNTBATTEN ROAD (211TH AVE.) EXTENDED CROSSES 210 FT. UPSTREAM OF
       THIS SECTION (NO ROAD CURRENTLY)
       ENCROACHMENTS (ET CARD) APPLIED FROM SEC. .3655 TO .7367 TO BLOCK
       OUT INEFFECTIVE FLOW IN LEFT OVERBANK (LOOKING DOWNSTREAM) BEYOND RIDGE.
     .366      4.14   1441.14       .00   1440.33   1441.48       .33      4.98       .04   1439.40
   1408.0     466.4     275.1     666.5     124.8      40.6     163.4       5.0       3.2   1439.20
      .04      3.74      6.78      4.08      .049      .042      .049      .000   1437.00   9890.00
  .009693      600.      620.      600.         5         0         0       .00    210.00  10100.00


*SECNO  .498

3470 ENCROACHMENT STATIONS=     9980.0   10091.5  TYPE=      1  TARGET=      111.500
     .498      3.07   1447.87       .00   1447.01   1448.35       .48      6.83       .04   1446.20
   1408.0     136.5     368.3     903.2      33.9      58.0     168.3       9.8       5.8   1445.90
      .07      4.03      6.35      5.37      .049      .042      .049      .000   1444.80   9980.00
  .009697      700.      720.      700.         4         0         0       .00    111.50  10091.50


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


*SECNO  .617

3470 ENCROACHMENT STATIONS=     9905.0   10075.0  TYPE=      1  TARGET=      170.000
     .617      3.14   1453.24       .00   1452.35   1453.51       .27      5.14       .02   1451.60
   1408.0     787.7     253.4     366.9     198.8      51.8      88.3      14.1       7.8   1451.50
      .11      3.96      4.89      4.15      .049      .042      .049      .000   1450.10   9905.00
  .007078      640.      650.      600.         5         0         0       .00    170.00  10075.00


*SECNO  .737

3470 ENCROACHMENT STATIONS=     9900.0   10020.0  TYPE=      1  TARGET=      120.000
     .737      3.58   1458.58       .00   1458.38   1459.10       .52      5.51       .07   1457.00
   1408.0     667.0     455.7     285.3     123.0      65.7      64.4      18.5      10.0   1456.20
      .15      5.42      6.93      4.43      .049      .042      .049      .000   1455.00   9900.00
  .010398      670.      650.      600.         2         0         0       .00    120.00  10020.00


*SECNO  .849

3470 ENCROACHMENT STATIONS=     9780.0    9991.6  TYPE=      1  TARGET=      211.600
     .849      4.06   1464.56       .00   1463.77   1464.86       .30      5.74       .02   1463.20
   1408.0    1072.7     335.3        .0     286.8      56.1        .0      22.6      12.3 100000.00
      .19      3.74      5.98       .00      .049      .042      .000      .000   1460.50   9780.00
  .008782      600.      610.      590.         5         0         0       .00    211.60   9991.60


*SECNO  .950
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3470 ENCROACHMENT STATIONS=     9841.6    9969.9  TYPE=      1  TARGET=      128.301
       ENCROACHMENT (ET CARD) APPLIED FROM SEC. .9498 TO 1.2254 TO BLOCK
       OUT INEFFECTIVE FLOW IN LEFT (LOOKING DOWNSTREAM) OVERBANK BEYOND RIDGE.
      .950      3.37   1469.57       .00   1468.58   1469.98       .41      5.08       .03   1468.50
    1408.0    1201.0     207.0        .0     237.0      37.9        .0      26.4      14.4 100000.00
       .21      5.07      5.47       .00      .049      .042      .000      .000   1466.20   9841.60
   .010284      530.      560.      530.         3         0         0       .00    128.30   9969.90


#SECNO 1.042

3470 ENCROACHMENT STATIONS=     9989.4   10088.8  TYPE=      1  TARGET=       99.399
     1.042      4.62   1475.12       .00   1474.43   1475.90       .78      5.81       .11   1471.80
    1408.0        .0     665.0     743.0        .0      76.2     142.9      29.2      15.7   1472.60
       .23       .00      8.73      5.20      .000      .042      .049      .000   1470.50   9989.40
   .013356      490.      515.      490.         4         0         0       .00     99.40  10088.80


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


#SECNO 1.097

3470 ENCROACHMENT STATIONS=     9980.0   10038.0  TYPE=      1  TARGET=       58.000
     1.097      4.20   1479.00       .00   1478.15   1480.04      1.03      4.06       .08   1475.80
    1408.0     426.8     477.4     503.8      54.8      48.9      75.7      30.5      16.2   1475.80
       .24      7.79      9.76      6.66      .049      .042      .049      .000   1474.80   9980.00
   .014210      280.      290.      305.         3         0         0       .00     58.00  10038.00


#SECNO 1.134

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=    10015.0   10120.0  TYPE=      1  TARGET=      105.000
     1.134      4.58   1481.18       .00   1480.36   1481.36       .18      1.23       .09   1477.90
     925.0     109.9     249.0     566.1      39.0      54.9     200.0      31.7      16.6   1477.00
       .26      2.82      4.53      2.83      .049      .042      .049      .000   1476.60  10015.00
   .002533      190.      205.      215.         3         0         0       .00    105.00  10120.00


#SECNO 1.178

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS=     9970.7   10025.8  TYPE=      1  TARGET=       55.100
     1.178      3.57   1483.57   1483.57   1482.58   1484.65      1.08      1.36       .27   1481.90
     925.0      59.7     729.6     135.8      12.2      80.6      27.1      32.9      17.0   1482.00
       .27      4.88      9.05      5.01      .049      .042      .049      .000   1480.00   9970.70
   .017410      230.      265.      250.        20        19         0       .00     55.10  10025.80
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*SECNO 1.225

3301 HV CHANGED MORE THAN HVINS

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


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


3470 ENCROACHMENT STATIONS=     9910.0   10015.1  TYPE=      1  TARGET=      105.100
       ENCROACHMENT (ET CARD) APPLIED TO BLOCK OUT INEFFECTIVE FLOW OUTSIDE
       4:1 FLARE FROM CULVERT OUTLET.
    1.225      3.29   1486.89       .00   1486.06   1487.20       .32      2.47       .08   1484.50
    925.0     453.3     471.7        .0     132.6      88.1        .0      33.9      17.5 100000.00
      .29      3.42      5.35       .00      .049      .042      .000      .000   1483.60   9910.00
  .006096      260.      260.      220.         3         0         0       .00    105.10  10015.10


CCHV=     .300 CEHV=     .500
*SECNO 1.237

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1490.50 ELREA=      1490.50

       BEGIN SUN VALLEY PARKWAY CULVERTS (4- 10' X 4' RCBS  - STRUC. NO.31)
    1.237      2.43   1488.43   1488.43   1488.42   1489.65      1.22       .55       .45   1490.50
    925.0        .0     925.0        .0        .0     104.3        .0      34.1      17.6   1490.50
      .29       .00      8.87       .00      .000      .035      .000      .000   1486.00   9978.50
  .015432       60.       60.       60.        20        15         0       .00     43.00  10021.50


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    4         .012      .20       2.63      .00       4.00      10.00     170.00    12        3         1486.60   1486.00

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 1.269

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.01

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

TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1491.10	1491.17	1.05	167.	931.	8.585	160.0	1490.00	113.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1491.50 ELREA= 1491.50

END CULVERTS (STRUC. #31). NO WEIR FLOW OVER ROAD EXPECTED, BUT FLOW OVER WEIR TO RIGHT OF CULVERT IS EXPECTED. HOWEVER THIS WEIR FLOW WILL NOT IMMEDIATELY RETURN TO CHANNEL.

1.269	2.96	1489.56	.00	1489.57	1490.70	1.14	1.05	.00	1491.10
1094.0	.0	1094.0	.0	.0	127.4	.0	34.6	17.8	1491.10
.29	.00	8.59	.00	.000	.012	.000	.000	1486.60	9978.50
.001341	170.	170.	170.	4	0	0	.00	43.00	10021.50

#SECNO 1.282
3280 CROSS SECTION 1.28 EXTENDED .24 FEET

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

3470 ENCROACHMENT STATIONS= 9968.0 10040.0 TYPE= 1 TARGET= 72.000
ENCROACHMENT APPLIED LIMITING FLOW TO ARMORED WEIR LEVEE WITH TOP OF LEVEE EL.= 1490.0.

1.282	2.24	1490.24	1490.24	1490.24	1491.21	.97	.22	.05	1540.00
1094.0	.0	1094.0	.0	.0	138.3	.0	34.8	17.9	100000.00
.30	.00	7.91	.00	.000	.035	.000	.000	1488.00	9968.00
.014823	70.	70.	70.	20	15	0	.00	72.00	10040.00

CCHV= .100 CEHV= .300
#SECNO -1.097
START TRIB COMP
-1.097 1.097 1479.004

3470 ENCROACHMENT STATIONS= 9980.0 10038.0 TYPE= 1 TARGET= 58.000
BEGIN TRIBUTARY 6A. REPEAT SECTION 1.097.

-1.097	4.20	1479.00	.00	1478.15	1480.04	1.03	.00	.00	1475.80
1408.0	426.8	477.4	503.8	54.8	48.9	75.7	35.8	18.3	1475.80
.31	7.79	9.76	6.66	.049	.042	.049	.000	1474.80	9980.00
.014202	280.	290.	305.	0	0	0	.00	58.00	10038.00

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

#SECNO 11.139

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.29

3470 ENCROACHMENT STATIONS= 10165.0 10245.0 TYPE= 1 TARGET= 80.000
ADD 10 TO CROSS-SECTION I.D. NUMBER FOR TRIB 6A.
STA. 10210= BASELINE TRIB. 6A.
ENCROACHMENT (ET CARD) APPLIED AT SEC.11.139 TO LIMIT INEFFECTIVE TO
WITHIN 4:1 FLARE FROM CULVERT OUTLET>

11.139	5.08	1480.58	.00	1479.69	1480.60	.03	.47	.10	1476.00
412.0	90.8	224.4	96.8	84.9	146.1	94.3	37.1	18.6	1476.10
.35	1.07	1.54	1.03	.049	.042	.049	.000	1475.50	10165.00
.000231	235.	225.	175.	3	0	0	.00	80.00	10245.00

CCHV= .300 CEHV= .500
*SECNO 11.148

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .42

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1484.90 ELREA= 1484.90

BEGIN SUN VALLEY PARKWAY CULVERTS (6- 12' X 6' RCBS. -STRUC. NO. 32)

11.148	2.16	1480.56	.00	1479.61	1480.66	.09	.02	.03	1484.90
412.0	.0	412.0	.0	.0	166.6	.0	37.3	18.7	1484.90
.36	.00	2.47	.00	.000	.035	.000	.000	1478.40	9961.50
.001303	45.	45.	45.	2	0	0	.00	77.00	10038.50

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	6	.012	.20	2.90	.00	6.00	12.00	144.00	12	3	1479.00	1478.40

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 11.175
1

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

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1480.583 EGOC = 1480.827 PCWSE= 1480.562 ELTRD= 1484.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.91

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1480.58	1480.83	.17	0.	412.	3.204	432.0	1484.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1485.50 ELREA= 1485.50

END CULVERTS (STRUC. #32). NO WEIR FLOW OVER ROAD EXPECTED.

11.175	1.67	1480.67	.00	1480.37	1480.83	.16	.17	.00	1485.50
412.0	.0	412.0	.0	.0	128.6	.0	37.8	19.0	1485.50
.37	.00	3.20	.00	.000	.012	.000	.000	1479.00	9961.50
.000358	144.	144.	144.	2	0	0	.00	77.00	10038.50

*SECNO 11.180
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9943.0 10065.0 TYPE= 1 TARGET= 122.000
ENCROACHMENT (ET CARD) APPLIED TO FLOODPLAIN\FLOODWAY TO LIMIT FLOW
ON LEFT SIDE WITHIN ARMORED WEIR LEVEE AND ON RIGHT SIDE WITHIN 1:1
FLARE FROM CULVERT INLET.

11.180	.90	1480.90	1480.90	1480.90	1481.32	.42	.03	.13	1481.00
412.0	.0	412.0	.0	.0	79.4	.0	37.9	19.0	1481.00
.37	.00	5.19	.00	.000	.035	.000	.000	1480.00	9950.99
.019309	30.	30.	30.	20	11	0	.00	96.22	10047.21

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THIS RUN EXECUTED 06MAY93 11:50:39

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH NO. 6 100-YEAR PRO

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	.254	1408.00	1435.25	.00	3.68	.00	9974.20	9990.70	.00	.00	9471.67	10517.25
	.254	1408.00	1436.25	.00	5.29	.00	9974.20	9990.70	9899.88	10157.49	9899.88	10157.49
	.366	1408.00	1440.33	.00	5.57	620.00	9983.20	9997.60	9889.30	10790.50	9890.05	10554.56
	.366	1408.00	1441.14	.00	6.78	620.00	9983.20	9997.60	9890.00	10100.00	9890.00	10100.00
	.498	1408.00	1447.01	.00	4.53	720.00	10000.00	10023.40	9911.00	10552.10	9911.69	10438.50
	.498	1408.00	1447.87	.00	6.35	720.00	10000.00	10023.40	9980.00	10091.50	9980.00	10091.50
	.617	1408.00	1452.35	.00	3.73	650.00	10008.80	10033.00	9502.00	10239.20	9759.76	10168.45
	.617	1408.00	1453.24	.00	4.89	650.00	10008.80	10033.00	9905.00	10075.00	9905.00	10075.00
	.737	1408.00	1458.38	.00	6.74	650.00	9955.10	9979.60	9739.80	10040.20	9862.30	10023.45
	.737	1408.00	1458.58	.00	6.93	650.00	9955.10	9979.60	9900.00	10020.00	9900.00	10020.00
	.849	1408.00	1463.77	.00	4.26	610.00	9970.60	9991.60	.00	.00	9523.28	10171.29
	.849	1408.00	1464.56	.00	5.98	610.00	9970.60	9991.60	9780.00	9991.60	9780.00	9991.60
*	.950	1408.00	1468.58	.00	4.36	560.00	9951.70	9969.90	9680.50	10441.10	9710.66	10091.25
	.950	1408.00	1469.57	.00	5.47	560.00	9951.70	9969.90	9841.60	9969.90	9841.60	9969.90

	1.042	1408.00	1474.43	.00	7.47	515.00	9989.40	10009.90	9860.40	10339.80	9945.07	10223.27
	1.042	1408.00	1475.12	.00	8.73	515.00	9989.40	10009.90	9989.40	10088.80	9989.40	10088.80
	1.097	1408.00	1478.15	.00	9.09	290.00	9996.80	10009.90	9788.20	10086.50	9856.41	10050.46
	1.097	1408.00	1479.00	.00	9.76	290.00	9996.80	10009.90	9980.00	10038.00	9980.00	10038.00
*	1.134	925.00	1480.36	.00	4.61	205.00	10028.90	10042.30	9859.10	10170.00	9927.59	10153.64
*	1.134	925.00	1481.18	.00	4.53	205.00	10028.90	10042.30	10015.00	10120.00	10015.00	10120.00
*	1.178	925.00	1482.58	1482.58	7.17	265.00	9978.20	10007.70	9914.30	10202.00	9966.23	10124.51
*	1.178	925.00	1483.57	1483.57	9.05	265.00	9978.20	10007.70	9970.70	10025.80	9970.70	10025.80

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	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	1.225	925.00	1486.06	.00	5.68	260.00	9985.20	10015.10	9798.30	10145.00	9851.20	10045.95
*	1.225	925.00	1486.89	.00	5.35	260.00	9985.20	10015.10	9910.00	10015.10	9910.00	10015.10
*	1.237	925.00	1488.42	1488.42	8.90	60.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	1.237	925.00	1488.43	1488.43	8.87	60.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	1.269	1094.00	1489.57	.00	8.56	170.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	1.269	1094.00	1489.56	.00	8.59	170.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	1.282	1094.00	1490.24	1490.24	7.91	70.00	9968.00	10040.00	9968.00	10040.00	9968.00	10040.00
*	1.282	1094.00	1490.24	1490.24	7.91	70.00	9968.00	10040.00	9968.00	10040.00	9968.00	10040.00
	-1.097	1408.00	1478.15	.00	9.15	290.00	9996.80	10009.90	9788.20	10086.50	9856.60	10050.41
	-1.097	1408.00	1479.00	.00	9.76	290.00	9996.80	10009.90	9980.00	10038.00	9980.00	10038.00
*	11.139	412.00	1479.69	.00	1.87	225.00	10186.50	10216.80	10160.00	10260.00	10160.00	10258.33
*	11.139	412.00	1480.58	.00	1.54	225.00	10186.50	10216.80	10165.00	10245.00	10165.00	10245.00
*	11.148	412.00	1479.61	.00	4.42	45.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.148	412.00	1480.56	.00	2.47	45.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.175	412.00	1480.37	.00	3.88	144.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.175	412.00	1480.67	.00	3.20	144.00	9961.50	10038.50	.00	.00	9961.50	10038.50
*	11.180	412.00	1480.90	1480.90	5.19	30.00	9950.00	10048.00	9943.00	10065.00	9950.98	10047.21
*	11.180	412.00	1480.90	1480.90	5.19	30.00	9950.00	10048.00	9943.00	10065.00	9950.99	10047.21

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WASH NO. 6 100-YEAR PRO

SUMMARY PRINTOUT

SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
.254	548.98	83.11	775.91	1.91	3.68	2.42	1435.70	1435.25	.00	1028.39	1433.00	1.09
.254	400.75	206.63	800.61	3.43	5.29	3.31	1437.00	1436.25	.00	257.61	1433.00	1.09
.366	119.43	160.32	1128.25	2.46	5.57	2.86	1441.80	1440.33	5.08	654.43	1437.00	1.19
.366	466.40	275.07	666.53	3.74	6.78	4.08	1441.80	1441.14	4.89	210.00	1437.00	1.17
.498	268.87	170.76	968.36	2.97	4.53	2.91	1448.60	1447.01	6.68	515.05	1444.80	1.07
.498	136.50	368.26	903.24	4.03	6.35	5.37	1448.60	1447.87	6.73	111.50	1444.80	1.04
.617	1012.77	113.22	282.01	3.33	3.73	2.64	1454.40	1452.35	5.35	408.69	1450.10	1.03

	.617	787.70	253.39	366.91	3.96	4.89	4.15	1454.40	1453.24	3.36	170.00	1450.10	1.02
	.737	757.03	411.23	239.74	4.88	6.74	4.19	1460.30	1458.38	6.02	161.15	1455.00	1.10
	.737	667.03	455.65	285.32	5.42	6.93	4.43	1460.30	1458.58	5.34	120.00	1455.00	1.08
	.849	884.27	167.48	356.25	2.33	4.26	2.51	1465.30	1463.77	5.39	648.01	1460.50	1.13
	.849	1072.73	335.27	.00	3.74	5.98	.00	1465.30	1464.56	5.98	211.60	1460.50	1.14
*	.950	1273.79	86.34	47.87	4.31	4.36	2.28	1472.50	1468.58	4.81	318.53	1466.20	1.04
	.950	1201.01	206.99	.00	5.07	5.47	.00	1472.50	1469.57	5.01	128.30	1466.20	1.00
	1.042	149.66	463.45	794.89	3.63	7.47	3.79	1477.90	1474.43	5.85	278.21	1470.50	1.38
	1.042	.00	664.97	743.03	.00	8.73	5.20	1477.90	1475.12	5.55	99.40	1470.50	1.22
	1.097	686.74	344.44	376.82	5.77	9.09	5.74	1481.10	1478.15	3.72	142.77	1474.80	1.13
	1.097	426.84	477.39	503.77	7.79	9.76	6.66	1481.10	1479.00	3.89	58.00	1474.80	1.08
*	1.134	281.83	202.72	440.46	2.33	4.61	2.53	1482.00	1480.36	2.21	226.05	1476.60	1.26
*	1.134	109.87	249.01	566.11	2.82	4.53	2.83	1482.00	1481.18	2.18	105.00	1476.60	1.15
*	1.178	20.84	368.06	536.10	3.03	7.17	4.77	1488.20	1482.58	2.21	158.27	1480.00	1.15
*	1.178	59.65	729.60	135.75	4.88	9.05	5.01	1488.20	1483.57	2.39	55.10	1480.00	1.17
*	1.225	347.35	359.94	217.71	2.88	5.68	4.26	1490.10	1486.06	3.48	194.75	1483.60	1.29
*	1.225	453.28	471.72	.00	3.42	5.35	.00	1490.10	1486.89	3.32	105.10	1483.60	1.16
*	1.237	.00	925.00	.00	.00	8.90	.00	1490.50	1488.42	2.36	43.00	1486.00	1.00
*	1.237	.00	925.00	.00	.00	8.87	.00	1490.50	1488.43	1.54	43.00	1486.00	1.00
*	1.269	.00	1094.00	.00	.00	8.56	.00	1491.10	1489.57	1.15	43.00	1486.60	1.00
*	1.269	.00	1094.00	.00	.00	8.59	.00	1491.10	1489.56	1.13	43.00	1486.60	1.00
*	1.282	.00	1094.00	.00	.00	7.91	.00	1490.00	1490.24	.68	72.00	1488.00	1.00
*	1.282	.00	1094.00	.00	.00	7.91	.00	1490.00	1490.24	.68	72.00	1488.00	1.00
	-1.097	686.07	345.42	376.52	5.81	9.15	5.77	1481.10	1478.15	-12.09	142.20	1474.80	1.13
	-1.097	426.84	477.37	503.79	7.79	9.76	6.66	1481.10	1479.00	-11.24	58.00	1474.80	1.08

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	11.139	101.20	222.38	88.42	1.29	1.87	1.14	1481.00	1479.69	1.53	98.33	1475.50	1.15
*	11.139	90.84	224.36	96.80	1.07	1.54	1.03	1481.00	1480.58	1.57	80.00	1475.50	1.11
*	11.148	.00	412.00	.00	.00	4.42	.00	1484.90	1479.61	-.08	77.00	1478.40	1.00
*	11.148	.00	412.00	.00	.00	2.47	.00	1484.90	1480.56	-.01	77.00	1478.40	1.00
*	11.175	.00	412.00	.00	.00	3.88	.00	1485.50	1480.37	.76	77.00	1479.00	1.00
*	11.175	.00	412.00	.00	.00	3.20	.00	1485.50	1480.67	.11	77.00	1479.00	1.00
*	11.180	.00	412.00	.00	.00	5.19	.00	1484.00	1480.90	.53	96.23	1480.00	1.00
*	11.180	.00	412.00	.00	.00	5.19	.00	1484.00	1480.90	.23	96.22	1480.00	1.00

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WASH NO. 6 100-YEAR PRO

SUMMARY PRINTOUT

SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR

	.254	.00	.00	1435.33	.08	.00	.00	71.55	.00	2.25	49.00	42.00	49.00
	.254	.00	.00	1436.46	.21	.00	.00	71.03	.00	3.25	49.00	42.00	49.00
	.366	620.00	6.45	1440.49	.16	5.13	.02	103.37	7.61	3.33	49.00	42.00	49.00
	.366	620.00	6.45	1441.48	.33	4.98	.04	96.93	5.02	4.14	49.00	42.00	49.00
	.498	720.00	10.83	1447.16	.15	6.67	.00	87.57	15.13	2.21	49.00	42.00	49.00
	.498	720.00	10.83	1448.35	.48	6.83	.04	96.97	9.78	3.07	49.00	42.00	49.00
	.617	650.00	8.15	1452.52	.16	5.35	.00	84.24	21.56	2.25	49.00	42.00	49.00
	.617	650.00	8.15	1453.51	.27	5.14	.02	70.78	14.07	3.14	49.00	42.00	49.00
	.737	650.00	7.54	1458.83	.45	6.23	.09	108.67	26.90	3.38	49.00	42.00	49.00
	.737	650.00	7.54	1459.10	.52	5.51	.07	103.98	18.48	3.58	49.00	42.00	49.00
	.849	610.00	9.02	1463.88	.11	5.02	.03	66.36	32.63	3.27	49.00	42.00	49.00
	.849	610.00	9.02	1464.86	.30	5.74	.02	87.82	22.59	4.06	49.00	42.00	.00
*	.950	560.00	10.18	1468.86	.28	4.93	.05	137.89	38.10	2.38	49.00	42.00	49.00
	.950	560.00	10.18	1469.98	.41	5.08	.03	102.84	26.38	3.37	49.00	42.00	.00
	1.042	515.00	8.35	1474.86	.43	5.96	.05	105.93	41.78	3.93	49.00	42.00	49.00
	1.042	515.00	8.35	1475.90	.78	5.81	.11	133.56	29.19	4.62	.00	42.00	49.00
	1.097	290.00	14.83	1478.86	.70	3.91	.08	173.32	43.59	3.35	49.00	42.00	49.00
	1.097	290.00	14.83	1480.04	1.03	4.06	.08	142.10	30.55	4.20	49.00	42.00	49.00
*	1.134	205.00	8.78	1480.51	.15	1.60	.06	35.20	44.90	3.76	49.00	42.00	49.00
*	1.134	205.00	8.78	1481.36	.18	1.23	.09	25.33	31.68	4.58	49.00	42.00	49.00
*	1.178	265.00	12.83	1483.10	.53	1.75	.11	198.88	46.35	2.58	49.00	42.00	49.00
*	1.178	265.00	12.83	1484.65	1.08	1.36	.27	174.10	32.88	3.57	49.00	42.00	49.00
*	1.225	260.00	13.85	1486.37	.31	3.24	.02	95.22	47.48	2.46	49.00	42.00	49.00
*	1.225	260.00	13.85	1487.20	.32	2.47	.08	60.96	33.88	3.29	49.00	42.00	.00
*	1.237	60.00	40.00	1489.65	1.23	.72	.46	156.20	47.72	2.42	.00	35.00	.00
*	1.237	60.00	40.00	1489.65	1.22	.55	.45	154.32	34.11	2.43	.00	35.00	.00
*	1.269	170.00	3.53	1490.70	1.14	1.06	.00	13.29	48.17	2.97	.00	12.00	.00
*	1.269	170.00	3.53	1490.70	1.14	1.05	.00	13.41	34.56	2.96	.00	12.00	.00
*	1.282	70.00	20.00	1491.21	.97	.22	.05	148.35	48.38	2.24	.00	35.00	.00
*	1.282	70.00	20.00	1491.21	.97	.22	.05	148.23	34.77	2.24	.00	35.00	.00
	-1.097	290.00	.00	1478.86	.71	.00	.00	176.20	49.58	3.35	49.00	42.00	49.00
	-1.097	290.00	.00	1480.04	1.03	.00	.00	142.02	35.84	4.20	49.00	42.00	49.00

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	SECND	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
*	11.139	225.00	3.11	1479.73	.04	.79	.07	4.49	50.80	4.19	49.00	42.00	49.00
*	11.139	225.00	3.11	1480.60	.03	.47	.10	2.31	37.06	5.08	49.00	42.00	49.00
*	11.148	45.00	64.44	1479.91	.30	.05	.13	87.77	50.99	1.21	.00	35.00	.00
*	11.148	45.00	64.44	1480.66	.09	.02	.03	13.03	37.31	2.16	.00	35.00	.00
*	11.175	144.00	4.17	1480.60	.23	.69	.00	6.69	51.32	1.37	.00	12.00	.00
*	11.175	144.00	4.17	1480.83	.16	.17	.00	3.58	37.80	1.67	.00	12.00	.00
*	11.180	30.00	33.33	1481.32	.42	.06	.09	192.91	51.38	.90	.00	35.00	.00
*	11.180	30.00	33.33	1481.32	.42	.03	.13	193.09	37.87	.90	.00	35.00	.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .950  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.134  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.134  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.178  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.178  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.178  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     1.178  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.178  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.178  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     1.225  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.225  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.237  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.237  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.237  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     1.237  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.237  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.237  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     1.269  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.269  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.282  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.282  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.282  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     1.282  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.282  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.282  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    11.139  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    11.139  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    11.148  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    11.148  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    11.175  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    11.175  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    11.180  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    11.180  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    11.180  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=    11.180  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    11.180  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    11.180  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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FLOODWAY DATA, WASH NO. 6 100-YEAR PRO
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.254	258.	398.	3.5	1436.3	1435.3	1.0
.366	210.	329.	4.3	1441.1	1440.3	.8
.498	111.	260.	5.4	1447.9	1447.0	.9
.617	170.	339.	4.2	1453.3	1452.4	.9
.737	120.	253.	5.6	1458.6	1458.4	.2
.849	212.	343.	4.1	1464.6	1463.8	.8
.950	128.	275.	5.1	1469.6	1468.6	1.0
1.042	99.	219.	6.4	1475.1	1474.4	.7
1.097	58.	179.	7.8	1479.1	1478.2	.9
1.134	105.	294.	3.1	1481.2	1480.4	.8
1.178	55.	120.	7.7	1483.6	1482.6	1.0
1.225	105.	221.	4.2	1486.9	1486.1	.8
1.237	43.	104.	8.9	1488.4	1488.4	.0
1.269	43.	127.	8.6	1489.6	1489.6	.0
1.282	72.	138.	7.9	1490.2	1490.2	.0
-1.097	58.	179.	7.8	1479.1	1478.2	.9
11.139	80.	325.	1.3	1480.6	1479.7	.9
11.148	77.	167.	2.5	1480.6	1479.6	1.0
11.175	77.	129.	3.2	1480.7	1480.4	.3
11.180	96.	79.	5.2	1480.9	1480.9	.0

```
1*****************************************
* HEC-2 WATER SURFACE PROFILES           *
*                                        *
* Version   4.6.0;  February 1991        *
*                                        *
* RUN DATE    06MAY93    TIME   11:51:02 *
*****************************************
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*************************************
* U.S. ARMY CORPS OF ENGINEERS      *
* HYDROLOGIC ENGINEERING CENTER     *
* 609 SECOND STREET, SUITE D        *
* DAVIS, CALIFORNIA 95616-4687      *
*         (916) 756-1104            *
*************************************
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X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X            X     X
X     X  X        X                        X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX              XXXXXXX
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06MAY93 11:51:02 PAGE 1

THIS RUN EXECUTED 06MAY93 11:51:02

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

 Version   4.6.0;  February 1991
***********************************
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T1      SUN VALLEY PARKWAY NORTH FIS. CONTRACT:FCDMC NO.90-04 FILE:WASH7-1
T2      100-YEAR WATER SURFACE PROFILE       A-N WEST INC. PHX.AZ.
T3      WASH NO 7, 100 YEAR PROFILE           DATE:7-25-91

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2                         .0055                                1392.3

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1                -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       43        1        2       26       39       21       22       27       28
    53       54        0       38       13       14       15       55       26       56
    63        1       51        4       42       57        0       38       39       33
     3       10       11       12        5        7        8       16       17       18
     0      200

NC    .049     .049     .045       .1        .3
QT      2     1248     1248
ET                      9.1                                                   10050    10308.09
        FLOODWAY MODEL UTILIZING FIXED ENCROACHMENT OPTION (METHOD 1) AND
        BASED ON PREVIOUS MODEL USING EQUAL CONVEYANCE REDUCTION (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
        CROSS SECTION 1, 5, NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM
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CROSS SECTION X. W. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM
ALONG BASELINE FROM CONFLUENCE WITH TRILBY WASH.
CROSS-SECTIONS ARE CODED FROM LEFT TO RIGHT LOOKING DOWNSTREAM WITH
STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
A CONTINUOUS DOMAINATE LOW FLOW CHANNEL WAS NOT EVIDENT BETWEEN
SEC. 0.2538 AND 1.4450. THEREFORE CHANNEL BANK STATIONS WERE CHOSEN
ALONG ONE SMALL CHANNEL ALIGNMENT WHICH PROVIDED THE MOST DIRECT

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COURSE TO TRILBY WASH.

X1	.2538	13	10050	10080	0	0	0			
GR	1393.7	9600	1392.2	9960	1392	10050	1391.5	10056	1391.5	10062
GR	1391.7	10080	1391.7	10300	1391.8	10600	1392	10800	1391.8	10900
GR	1391.8	10950	1392	11060	1393	11350				
ET			9.1						10220	10444.9
X1	0.3977	10	10220	10245	750	660	720			
GR	1398.2	9715.0	1397.0	10000.0	1397.5	10100.0	1397.2	10220.0	1396.8	10230
GR	1396.8	10240	1397.2	10245	1397.5	10580	1398	11280	1398.2	11285
ET			9.1						10257.7	10470
X1	0.4952	20	10425	10470	500	630	540			
GR	1404.2	9750.0	1404.0	9815.0	1402.0	10000.0	1401.6	10070.0	1402.0	10140.0
GR	1402.3	10180.0	1402.0	10220.0	1401.7	10315.0	1402.0	10370.0	1402.2	10400.0
GR	1404.0	10425.0	1401.6	10450	1401.7	10455	1401.9	10470	1402.0	10550
GR	1403.8	11000	1402.6	11190	1402.6	11200	1404.0	11310	1405.0	11510
ET			9.1						10497.4	10850.0
X1	0.6505	25	10825	10850	820	740	790			
GR	1409.0	9425.0	1408.9	9498.0	1408.9	9540.0	1408.8	9570.0	1408.7	9720.0
GR	1407.8	9950.0	1407.9	10000.0	1408.0	10115.0	1407.8	10130.0	1408.0	10140.0
GR	1408.4	10240.0	1408.0	10280.0	1407.7	10315.0	1408.0	10345.0	1408.9	10470.0
GR	1408.6	10520.0	1408.3	10600.0	1408.0	10790.0	1407.8	10800.0	1407.8	10814.0
GR	1408.0	10825.0	1407.6	10845.0	1408.0	10850.0	1409.0	11000.0	1409.9	11330.0
ET			9.1						10414.2	11040
X1	0.7794	31	11020	11040	690	415	450			
GR	1413.5	9320	1412.5	9550	1412	9585	1411.9	9600	1412.0	9625
GR	1411.8	9650	1411.8	9654	1412	9660	1412	9750	1413	9850
GR	1412	9900	1411.9	9902	1411.9	9906	1412	9930	1413	10000
GR	1413	10430	1413.8	10650	1413.8	10750	1412.5	10980	1412.2	11000
GR	1412.2	11020	1411.8	11025	1411.8	11035	1412.2	11040	1412.7	11080
GR	1412.7	11230	1411.8	11240	1411.8	11244	1412.0	11250	1412.5	11320
GR	1414	11460								
ET			9.1						10488.1	11041.5
X1	0.8513	36	11003.3	11041.5	360	390	400			
GR	1418	8900	1416	9300	1416	9340	1415.8	9342	1415.8	9346
GR	1416	9350	1416	9650	1416	9750	1415.8	9770	1415.8	9800
GR	1416.0	9850	1416.0	10000	1416.1	10100	1416.5	10220	1416.2	10243.0
GR	1416.2	10296.9	1416.3	10395.4	1416.3	10487.1	1416.8	10555.6	1417.4	10617.9
GR	1416.6	10670.9	1416.8	10722.8	1417.1	10789.1	1417.2	10848.7	1416.9	10912.8
GR	1416.3	10953.2	1416.1	11003.3	1415.8	11025.5	1416.0	11041.5	1416.2	11073.9
GR	1416.2	11135.2	1416.2	11186.9	1416.2	11243.5	1416.3	11301.3	1417.1	11361.9
GR	1418.1	11431.3								
ET			9.1						10392.9	10939.3
X1	1.0047	62	10900	10939.3	740	750	770			
GR	1425.2	9276.9	1425.5	9286.4	1425.4	9295.7	1424.3	9304.1	1424.6	9310.5
GR	1425.2	9319.3	1425.2	9329.0	1425.2	9338.2	1425.2	9347.9	1425.1	9358.4
GR	1425.4	9370.3	1425.1	9382.3	1425.1	9391.1	1425.1	9402.9	1425.0	9415.6
GR	1425.5	9557.7	1425.5	9571.0	1424.0	9582.7	1423.9	9596.1	1423.9	9612.9
GR	1423.8	9741.4	1423.9	9751.7	1423.9	9764.8	1423.9	9778.0	1423.8	9790.8

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GR   1424.0    9803.8    1423.8    9838.5    1423.9    9844.2    1424.0    9851.8    1424.1    9863.7
GR   1424.3    9926.1    1424.2    9935.7    1424.3    9944.3    1424.1    9956.0    1424.0    9967.4
GR   1424.0   10061.4    1423.8   10099.8    1423.9   10108.4    1423.9   10118.5    1423.9   10132.5
GR   1424.0   10202.2    1424.6   10217.5    1424.8   10227.6    1424.9   10239.5    1425.0   10251.9
GR   1423.9   10334.0    1423.9   10373.4    1424.2   10407.4    1424.2   10456.8    1424.2   10509.2
GR   1425.1   10618.5    1424.9   10735.3    1424.8   10815.8    1424.1   10875.6    1423.7     10900
GR   1423.6   10939.3    1423.9   10984.5    1424.1   11037.7    1423.9   11077.7    1423.6   11101.3
GR   1424.1   11153.9    1424.6   11193.2

QT        2      1009      1009
ET                          9.1                                                    10456.9   10773.4
        DECREASE DISCHARGE UPSTREAM OF TRIBUTARY.
X1   1.1439        45   10736.5   10773.4       700       740       740
GR   1432.4    9438.4    1432.5    9446.9    1432.5    9455.1    1432.7    9466.9    1432.3    9479.3
GR   1432.1    9488.1    1431.9    9499.8    1431.8    9512.2    1431.7    9522.4    1431.7    9525.9
GR   1430.9    9661.7    1431.0    9674.0    1431.3    9687.9    1431.2    9697.7    1431.3    9707.0
GR   1431.3    9723.9    1431.5    9743.6    1431.5    9779.9    1431.3    9813.1    1431.3    9836.2
GR   1431.8    9954.1    1432.0    9997.2    1432.0   10000.0    1432.0   10000.1    1431.8   10007.4
GR   1431.9   10083.7    1431.8   10095.5    1431.9   10108.9    1432.0   10122.1    1431.9   10136.8
GR   1432.0   10446.7    1432.0   10499.4    1431.9   10535.5    1431.3   10583.5    1431.9   10629.7
GR   1432.3   10648.3    1432.8   10659.8    1431.5   10736.5    1431.3   10746.5    1431.3   10763.4
GR   1431.4   10773.4    1431.7   10808.4    1431.9   10843.6    1432.4   10869.6    1432.2   10900.0

ET                          9.1                                                    10387.0   10666.3
X1   1.2064        52     10615   10666.3       320       290       300
GR   1436.3    9653.2    1435.5    9673.0    1435.6    9685.6    1434.8    9691.7    1434.8    9696.6
GR   1435.6    9731.7    1435.6    9738.1    1435.7    9747.9    1435.7    9758.5    1435.9    9766.1
GR   1435.0    9859.1    1435.1    9869.6    1434.9    9875.4    1434.9    9883.2    1434.9    9888.5
GR   1435.5   10000.0    1435.5   10000.1    1435.7   10008.2    1435.6   10017.7    1435.1   10026.8
GR   1434.9   10094.3    1434.6   10104.7    1434.5   10115.3    1434.5   10122.7    1434.8   10135.0
GR   1434.6   10143.1    1434.6   10150.3    1434.6   10156.0    1434.7   10162.6    1434.8   10169.3
GR   1434.6   10177.5    1435.0   10197.3    1435.4   10210.2    1435.7   10220.2    1435.8   10230.5
GR   1436.2   10279.5    1435.6   10338.1    1435.4   10376.5    1435.3   10420.2    1435.7   10468.9
GR   1435.8   10526.6    1435.5   10562.9    1434.8   10597.6    1434.5     10615    1434.2     10620
GR   1434.2     10660    1434.5   10666.3    1434.5   10715.0    1434.5   10762.9    1434.8   10807.6
GR   1435.5   10846.6    1436.3   10880.4

ET                          9.1                                                    10249.8   10515.8
X1   1.2822        69   10481.6   10515.8       400       425       430
GR   1440.2    9618.5    1440.2    9635.6    1439.4    9653.1    1439.6    9668.1    1439.8    9682.7
GR   1440.0    9694.6    1440.0    9707.3    1440.0    9719.6    1440.0    9730.9    1439.9    9745.4
GR   1439.8    9757.8    1439.5    9767.2    1439.6    9774.5    1439.4    9787.5    1439.3    9800.9
GR   1439.1    9949.5    1438.9    9960.2    1438.2    9967.8    1438.9    9973.7    1439.0    9982.3
GR   1439.1    9999.2    1438.9   10000.0    1438.9   10000.1    1438.8   10009.0    1438.7   10019.6
GR   1438.7   10086.4    1438.7   10096.4    1438.4   10104.0    1439.0   10117.2    1439.8   10130.4
GR   1440.2   10141.3    1440.3   10154.3    1440.0   10165.9    1439.5   10179.4    1439.3   10189.7
GR   1440.0   10202.3    1439.7   10215.9    1439.5   10234.6    1439.5   10252.3    1439.5   10270.5
GR   1439.2   10393.0    1439.0   10413.3    1439.3   10437.6    1439.5   10454.4    1439.3   10468.0
GR   1439.1   10481.6    1438.1   10494.2    1438.2   10505.3    1438.4   10515.8    1438.8   10527.4
GR   1439.1   10540.0    1438.8   10550.4    1438.7   10555.7    1438.6   10565.9    1438.7   10576.6
GR   1438.3   10586.7    1438.2   10597.7    1438.6   10612.6    1438.8   10627.3    1439.1   10643.1
GR   1438.6   10708.6    1439.2   10721.5    1439.2   10734.1    1439.3   10745.2    1439.7   10760.5
GR   1440.2   10774.9    1440.5   10787.9    1440.5   10798.9    1440.5   10802.1
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ET                 7.1       9.1                                   9537.5   10548.1   10030.4   10240.2
        ENCROACHMENT (ET CARD) APPLIED TO CONTAIN FLOW WITHIN RIDGE  ON LEFT.
X1   1.3769        68   10210.1   10240.2       470       400       430
GR   1443.8    9509.8    1444.0    9518.3    1444.0    9530.5    1444.3    9537.5    1443.8    9545.3
GR   1443.9    9555.2    1443.6    9561.0    1443.7    9570.0    1443.9    9581.4    1444.0    9590.2
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GR	1443.7	9593.9	1443.8	9606.8	1443.4	9603.8	1443.8	9608.3	1443.9	9614.1
GR	1443.9	9622.9	1443.9	9630.9	1444.2	9641.7	1443.8	9652.9	1443.8	9663.6
GR	1443.7	9675.6	1443.5	9686.3	1443.3	9697.9	1443.0	9710.7	1443.2	9719.0
GR	1443.3	9730.0	1443.4	9738.4	1443.2	9748.9	1443.2	9753.5	1443.2	9757.4
GR	1444.0	9815.3	1443.9	9824.4	1443.7	9832.3	1443.6	9840.7	1443.4	9850.0
GR	1444.1	9953.5	1444.1	9965.4	1444.0	9978.6	1444.1	9986.4	1444.0	9994.1
GR	1443.2	9997.9	1443.4	10000.0	1443.4	10000.1	1443.9	10004.6	1444.1	10010.3
GR	1444.0	10058.0	1444.0	10067.8	1444.0	10078.0	1443.9	10086.8	1443.9	10099.3
GR	1443.6	10177.9	1443.7	10187.9	1443.4	10197.4	1443.3	10210.1	1442.9	10222.1
GR	1442.5	10232.1	1442.6	10236.1	1443.1	10240.2	1443.0	10249.8	1443.2	10300.0
GR	1444.0	10360.0	1444.2	10412.4	1444.3	10426.7	1444.4	10438.1	1444.4	10450.3
GR	1444.1	10527.5	1444.3	10546.8	1444.3	10548.1				
NC	.049	.049	.042							
ET			9.1						9842	10019.8
X1	1.4450	69	10000.1	10019.8	360	360	400			
GR	1448.3	9436.1	1448.4	9450.9	1448.1	9465.2	1447.5	9483.7	1446.7	9501.6
GR	1446.2	9517.4	1446.2	9528.0	1446.5	9539.3	1447.1	9548.7	1447.2	9559.7
GR	1446.9	9570.1	1446.4	9581.1	1446.2	9589.0	1446.4	9596.0	1445.5	9602.2
GR	1445.5	9605.8	1446.7	9611.8	1446.0	9618.6	1446.7	9631.6	1447.4	9641.7
GR	1447.5	9649.6	1447.0	9660.3	1446.8	9667.4	1446.8	9677.7	1447.1	9687.7
GR	1446.8	9697.9	1446.8	9710.4	1447.0	9721.1	1446.5	9726.7	1446.7	9733.7
GR	1447.0	9744.5	1446.9	9754.8	1447.0	9763.7	1447.1	9773.2	1447.2	9784.7
GR	1447.3	9800.2	1447.2	9810.6	1446.7	9821.0	1446.9	9828.5	1447.0	9835.8
GR	1446.8	9844.3	1446.8	9853.4	1447.0	9863.9	1447.0	9875.0	1447.0	9888.6
GR	1447.2	9902.1	1447.2	9915.3	1447.0	9927.8	1447.5	9941.3	1447.5	9958.0
GR	1447.6	9971.7	1447.6	9984.9	1447.2	9996.2	1446.9	10000.0	1446.9	10000.1
GR	1446.0	10006.2	1445.9	10012.4	1446.0	10017.0	1446.6	10019.8	1446.8	10028.1
GR	1447.0	10040.9	1447.3	10055.8	1447.4	10069.9	1447.5	10083.8	1447.9	10094.3
GR	1447.9	10108.0	1447.8	10119.5	1447.9	10130.9	1448.7	10145.3		
ET			9.1						9891.1	9991.1
X1	1.5094	53	9967.7	9991.1	325	340	340			
GR	1450.8	9567.8	1451.1	9577.1	1451.1	9587.6	1450.7	9600.6	1450.3	9612.4
GR	1450.0	9625.2	1450.0	9634.8	1449.7	9647.9	1449.7	9667.9	1449.6	9677.4
GR	1449.6	9692.1	1449.0	9696.6	1449.6	9700.8	1449.8	9710.1	1450.1	9719.0
GR	1450.3	9731.0	1450.2	9743.1	1449.8	9757.1	1449.9	9764.5	1450.1	9771.4
GR	1449.8	9780.0	1449.9	9788.8	1449.9	9802.4	1450.1	9811.0	1450.3	9822.9
GR	1450.1	9836.2	1450.1	9848.5	1449.9	9859.5	1449.8	9866.0	1449.5	9871.2
GR	1449.8	9879.3	1449.8	9889.9	1449.7	9899.7	1449.9	9910.2	1448.9	9920.3
GR	1449.8	9926.8	1449.9	9935.6	1449.5	9944.9	1449.3	9955.7	1449.3	9967.7
GR	1449.4	9979.5	1448.5	9986.3	1449.0	9991.1	1449.5	10000.0	1449.2	10000.1
GR	1449.2	10000.2	1449.6	10010.1	1450.4	10021.0	1451.0	10034.3	1451.2	10048.0
GR	1452.3	10059.8	1452.4	10069.9	1452.4	10070.0				

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ET		7.1	9.1				9676.6	10272.1	9892.5	10049.2
	ET CARD APPLIED TO CONTAIN FLOW WITHIN RIDGE ON LEFT.									
X1	1.5549	57	10000.1	10020.0	215	250	240			
GR	1452.0	9648.3	1452.9	9655.4	1452.9	9666.0	1452.9	9676.6	1452.0	9690.2
GR	1452.0	9701.7	1452.0	9713.6	1451.9	9724.0	1451.9	9732.8	1451.8	9741.1
GR	1451.6	9748.5	1451.6	9756.1	1451.5	9769.8	1451.5	9783.5	1451.7	9798.5
GR	1451.5	9818.0	1451.5	9831.0	1451.7	9845.3	1451.9	9860.0	1451.9	9871.1
GR	1451.8	9881.5	1451.6	9896.3	1451.5	9906.1	1451.5	9920.2	1451.2	9925.8
GR	1451.1	9935.6	1451.0	9943.0	1451.3	9953.8	1451.6	9965.8	1451.6	9978.1
GR	1451.4	10000.0	1451.4	10000.1	1451.4	10007.9	1450.4	10011.8	1450.5	10015.4
GR	1451.5	10020.0	1451.4	10028.6	1451.2	10040.2	1451.2	10048.1	1451.4	10057.6
GR	1451.3	10067.5	1451.4	10079.3	1451.3	10089.8	1451.0	10098.4	1451.0	10109.9
GR	1451.0	10124.9	1450.9	10139.5	1451.2	10152.5	1451.9	10168.7	1452.4	10186.2
GR	1453.0	10199.6	1453.3	10210.8	1453.5	10223.9	1454.3	10238.5	1454.9	10255.8
GR	1455.2	10268.4	1455.3	10272.1						
ET			9.1						9969.2	10086.0

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X1   1.5907        41      9973    10014.9       200       185       170
GR   1454.7    9786.7    1454.5     9796.3    1454.4    9805.8    1454.1    9817.3    1453.8    9828.3
GR   1453.7    9838.8    1453.3     9847.9    1453.2    9861.2    1453.2    9873.7    1453.1    9887.9
GR   1453.1    9900.2    1453.2     9912.1    1453.2    9927.2    1453.2    9940.1    1453.1    9952.8
GR   1453.2    9965.4    1453.1     9978.7    1453.2    9991.4    1452.8      9995    1452.5   10000.1
GR   1452.5   10006.6    1452.9    10014.9    1453.0   10027.2    1453.3   10039.7    1453.1   10053.2
GR   1453.1   10064.6    1453.0    10074.9    1453.0   10092.3    1452.7   10103.0    1452.8   10113.1
GR   1452.7   10125.5    1452.6    10133.9    1452.6   10144.0    1452.6   10151.1    1452.7   10156.8
GR   1453.3   10163.9    1453.6    10175.1    1453.7   10190.5    1454.4   10208.4    1454.8   10217.9
GR   1455.3   10221.2

ET                          9.1                                                        9900.8   10024.6
X1   1.6297        45    9989.5    10024.6       220       195       200
GR   1456.1    9669.1    1455.3     9716.6    1455.3    9733.6    1455.1    9743.5    1455.1    9755.6
GR   1454.9    9769.1    1454.5     9782.3    1454.4    9792.1    1454.8    9802.1    1454.3    9810.5
GR   1455.0    9818.4    1454.8     9835.1    1454.7    9848.9    1455.1    9866.4    1455.0    9878.3
GR   1455.3    9893.7    1455.3     9902.5    1454.8    9909.3    1455.1    9915.3    1455.4    9922.4
GR   1455.1    9933.0    1455.3     9944.7    1455.0    9954.8    1455.5    9963.8    1455.5    9978.3
GR   1455.5    9989.5    1454.1    10000.0    1454.1   10000.1    1454.2   10012.7    1455.1   10024.6
GR   1454.6   10030.0    1455.0    10041.9    1455.2   10057.1    1455.3   10068.2    1455.5   10076.6
GR   1454.6   10085.1    1454.9    10089.6    1456.0   10095.1    1456.5   10103.6    1456.7   10113.3
GR   1456.8   10120.9    1457.6    10130.8    1458.2   10142.7    1458.4   10154.7    1458.7   10157.2

ET                          9.1                                                        9917.1   10005.2
X1   1.6723        39    9988.3    10005.2       260       215       225
GR   1458.1    9717.0    1457.3     9733.1    1457.3    9749.2    1457.5    9777.2    1457.5    9790.0
GR   1456.9    9799.0    1456.4     9807.7    1457.3    9816.0    1456.9    9826.6    1456.9    9838.7
GR   1456.9    9906.2    1457.1     9919.5    1456.9    9929.2    1457.2    9942.5    1456.9    9952.8
GR   1456.9    9965.3    1457.3     9976.9    1457.2    9988.3    1455.8    9992.8    1455.8    9999.7
GR   1455.9   10000.0    1455.9    10000.1    1456.3   10005.2    1457.5   10013.7    1457.3   10024.2
GR   1456.3   10033.6    1457.9    10041.3    1458.3   10051.0    1459.3   10060.1    1459.1   10069.2
GR   1459.2   10079.0    1459.3    10091.3    1458.4   10100.9    1458.8   10112.4    1459.2   10127.3
GR   1460.1   10144.1    1460.5    10158.5    1460.6   10168.4    1460.8   10170.1
1
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ET                  7.1       9.1                                          9966      10034     9970.5    10014.0
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EXPANSION DOWNSTREAM OF
        CULVERT TO 4 TO 1 FLARE.
X1   1.7178        36   10000.0    10012.7       260       225       240
GR   1460.4    9689.8    1460.5     9720.1    1460.5    9744.2    1460.2    9764.9    1460.3    9778.4
GR   1460.2    9794.8    1460.4     9810.0    1460.2    9826.2    1459.8    9839.7    1459.4    9849.6
GR   1459.8    9862.1    1459.4     9872.6    1459.2    9884.8    1459.3    9898.5    1457.7    9908.5
GR   1458.1    9913.9    1459.4     9920.5    1459.1    9927.3    1458.4    9934.2    1458.3    9948.0
GR   1458.2    9967.7    1458.1     9985.7    1457.9   10000.0    1457.7   10000.1    1457.6   10006.4
GR   1457.7   10012.7    1458.3    10020.5    1459.0   10037.0    1460.1   10050.7    1460.7   10063.7
GR   1461.6   10070.8    1462.5    10085.1    1462.3   10094.8    1462.5   10106.8    1462.9   10120.4
GR   1462.9   10126.1

NC     .035      .035      .035        .3        .5
        BEGIN SUN VALLEY PARKWAY CULVERTS (4- 10'X 4' RCB'S  \ STRUC. #36)
        WEIR FLOW OVER MEDIAN TO LEFT BEGINS AT EL. 1466.0 AND TO CHANN.
        AT RIGHT AT INVERT EL.=1466
X1    1.727         4    9978.5    10021.5        50        50        50
X3       10
GR   1464.1    9978.5    1459.6     9978.5    1459.6   10021.5    1464.1   10021.5

NC     .012      .012      .012
SC    4.012        .2       2.9         0         4        10       147      12.3    1460.2    1459.6
        END CULVERTS
X1    1.755         0         0         0       147       147       147                .6
X2                          2    1464.2    1466.0
X3       10                                                        1466.0    1466.0
BT       12      9237    1466.9                9387      1466                9537    1466.1
BT     9587    1466.37                10000    1467.7                10712    1468.7                10712.5
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BT   1468.2            10352.5    1467.4              10360.5      1467              10364.5      1466
BT            10369.5    1466.0              10377.5     1468.0

NC     .048      .048      .035
ET                7.1       9.1                                    9940      10068       9940      10068
        ENCROACHMENT (ET CARD) APPLIED AT THIS SECTION TO LIMIT EFFECTIVE
        FLOW AREA TO 45 DEGREE CONTRACTION ANGLE FROM INLET
X1    1.761        11      9980     10040        34        34        34
GR     1465      9605      1463      9868      1462      9920    1462.5      9950      1461      9980
GR     1461     10025      1462     10040      1463     10058      1463     10147      1464     10188
GR     1465     10215
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        DLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


#PROF 1

CCHV=    .100 CEHV=     .300
#SECNO  .254
        FLOODWAY MODEL UTILIZING FIXED ENCROACHMENT OPTION (METHOD 1) AND
        BASED ON PREVIOUS MODEL USING EQUAL CONVEYANCE REDUCTION (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
        CROSS-SECTION I. D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM
        ALONG BASELINE FROM CONFLUENCE WITH TRILBY WASH.
        CROSS-SECTIONS ARE CODED FRON LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        A CONTINUOUS DOMAINATE LOW FLOW CHANNEL WAS NOT EVIDENT BETWEEN
        SEC. 0.2538 AND 1.4450. THEREFORE CHANNEL BANK STATIONS WERE CHOSEN
        ALONG ONE SMALL CHANNEL ALIGNMENT WHICH PROVIDED THE MOST DIRECT
        COURSE TO TRILBY WASH.
      .254       .97   1392.47       .00   1392.30   1392.51       .04       .00       .00   1392.00
    1248.0      43.5      56.7    1147.8      42.1      25.8     685.1        .0        .0   1391.70
       .00      1.03      2.19      1.68      .049      .045      .049      .000   1391.50   9895.08
   .005403        0.        0.        0.         0         0         5       .00   1301.36  11196.43


#SECNO  .398

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

      .398      1.12   1397.92       .00       .00   1398.00       .08      5.48       .01   1397.20
    1248.0     547.9      94.2     605.9     236.0      25.0     314.7      10.4      21.0   1397.20
       .09      2.32      3.77      1.93      .049      .045      .049      .000   1396.80   9781.42
   .013020      750.      720.      660.         5         0         0       .00   1386.98  11168.40


#SECNO  .495

3265 DIVIDED FLOW


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

      .495      1.23   1402.83       .00       .00   1402.90       .07      4.90       .00   1404.00
    1248.0     899.1      71.4     277.5     399.7      29.1     163.3      17.8      35.9   1401.90
       .16      2.25      2.46      1.70      .049      .045      .049      .000   1401.60   9923.68
   .006507      500.      540.      630.         5         0         0       .00    867.35  11217.69
```

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

*SECNO .650

3265 DIVIDED FLOW

.650	1.11	1408.71	.00	.00	1408.77	.06	5.87	.00	1408.00
1248.0	1132.4	63.7	51.9	576.6	22.7	37.8	29.2	54.8	1408.00
.27	1.96	2.80	1.37	.049	.045	.049	.000	1407.60	9705.18
.008158	820.	790.	740.	5	0	0	.00	1193.19	10956.48

*SECNO .779

3265 DIVIDED FLOW

.779	1.26	1413.06	.00	.00	1413.12	.05	4.35	.00	1412.20
1248.0	906.3	63.9	277.7	487.8	23.2	170.0	38.9	74.8	1412.20
.37	1.86	2.75	1.63	.049	.045	.049	.000	1411.80	9421.10
.005716	690.	450.	415.	4	0	0	.00	1516.97	11372.31

*SECNO .851

3265 DIVIDED FLOW

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

.851	.66	1416.46	.00	.00	1416.54	.08	3.42	.01	1416.10
1248.0	1076.5	58.2	113.2	482.9	20.2	68.3	44.1	88.1	1416.00
.41	2.23	2.88	1.66	.049	.045	.049	.000	1415.80	9208.40
.017804	360.	400.	390.	4	0	0	.00	1655.23	11313.27

*SECNO 1.005

3265 DIVIDED FLOW

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

1.005	.94	1424.54	.00	.00	1424.59	.05	8.05	.00	1423.70
1248.0	863.8	92.3	291.9	493.6	35.2	150.2	54.8	113.0	1423.60
.52	1.75	2.62	1.94	.049	.045	.049	.000	1423.60	9302.22
.007277	740.	770.	750.	5	0	0	.00	1261.97	11189.01

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

*SECNO 1.144

*SECNO 1.144

3265 DIVIDED FLOW

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

DECREASE DISCHARGE UPSTREAM OF TRIBUTARY.

1.144	1.07	1431.97	.00	.00	1432.09	.12	7.48	.02	1431.50
1009.0	887.4	78.4	43.1	328.5	23.4	21.2	63.4	132.3	1431.40
.60	2.70	3.35	2.04	.049	.045	.049	.000	1430.90	9495.41
.018890	700.	740.	740.	5	0	0	.00	1121.29	10847.50

*SECNO 1.206

3265 DIVIDED FLOW

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

1.206	1.30	1435.50	.00	.00	1435.59	.09	3.50	.00	1434.50
1009.0	426.1	218.7	364.2	242.4	65.3	149.3	66.3	139.3	1434.50
.63	1.76	3.35	2.44	.049	.045	.049	.000	1434.20	9672.85
.007456	320.	300.	290.	3	0	0	.00	803.92	10846.86

*SECNO 1.282

3265 DIVIDED FLOW

1.282	1.35	1439.45	.00	.00	1439.57	.12	3.97	.01	1439.10
1009.0	427.9	149.3	431.8	195.8	37.6	154.3	70.3	146.9	1438.40
.67	2.19	3.97	2.80	.049	.045	.049	.000	1438.10	9651.73
.012713	400.	430.	425.	4	0	0	.00	818.77	10751.42

*SECNO 1.377

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9537.5 10548.1 TYPE= 1 TARGET= 1010.600

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ENCROACHMENT (ET CARD) APPLIED TO CONTAIN FLOW WITHIN RIDGE ON LEFT.

1.377	1.68	1444.18	.00	.00	1444.28	.10	4.70	.00	1443.30
1009.0	584.3	151.1	273.6	299.0	39.8	105.7	74.6	155.8	1443.10
.73	1.95	3.80	2.59	.049	.045	.049	.000	1442.50	9539.34
.009122	470.	430.	400.	5	0	0	.00	896.40	10535.44

*SECNO 1.445

3265 DIVIDED FLOW

1.445	2.05	1447.55	.00	.00	1447.68	.12	3.39	.01	1446.90
1009.0	838.9	118.6	51.5	323.1	27.6	26.1	78.0	161.9	1446.60
.76	2.60	4.29	1.98	.049	.042	.049	.000	1445.50	9481.93
.009456	360.	400.	360.	3	0	0	.00	583.11	10085.30

*SECNO 1.509

1.509	2.12	1450.62	.00	.00	1450.77	.15	3.09	.01	1449.30

```
   1009.0     748.8     139.8     100.8     282.3      33.4      32.0      80.7     183.7    1449.00
      .79      2.65      4.50      3.15      .049      .042      .049      .000   1448.50    9602.79
  .009354      325.      340.      340.         3         0         0       .00    423.21   10026.00


*SECNO 1.555

3470 ENCROACHMENT STATIONS=     9676.6   10272.1  TYPE=      1  TARGET=      595.500
       ET CARD APPLIED TO CONTAIN FLOW WITHIN RIDGE ON LEFT.
    1.555      1.97   1452.37       .00       .00   1452.46       .09      1.68       .01   1451.40
   1009.0     475.3      86.8     446.8     233.7      26.4     173.8      82.8     168.1   1451.50
      .82      2.03      3.28      2.57      .049      .042      .049      .000   1450.40   9684.67
  .005995      215.      240.      250.         4         0         0       .00    500.35  10185.02


*SECNO 1.591

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

    1.591      1.42   1453.92       .00       .00   1454.11       .18      1.62       .03   1452.80
   1009.0     330.7     124.0     554.3     118.0      26.0     161.7      84.4     170.0   1452.90
      .83      2.80      4.78      3.43      .049      .042      .049      .000   1452.50   9823.67
  .012796      200.      190.      185.         2         0         0       .00    372.62  10196.29


*SECNO 1.630
    1.630      1.86   1455.96       .00       .00   1456.09       .12      1.98       .01   1455.50
   1009.0     663.0     195.6     150.4     263.8      50.7      61.3      86.0     171.9   1455.10
      .86      2.51      3.86      2.45      .049      .042      .049      .000   1454.10   9677.52
  .007321      220.      200.      195.         3         0         0       .00    417.37  10094.89


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


*SECNO 1.672
    1.672      2.21   1458.01       .00       .00   1458.20       .19      2.09       .02   1457.20
   1009.0     729.3     176.6     103.1     247.1      32.7      34.5      88.0     174.0   1456.30
      .88      2.95      5.40      2.98      .049      .042      .049      .000   1455.80   9718.72
  .009824      260.      225.      215.         3         0         0       .00    325.36  10044.08


*SECNO 1.718

3470 ENCROACHMENT STATIONS=     9966.0   10034.0  TYPE=      1  TARGET=       68.000
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EXPANSION DOWNSTREAM OF
       CULVERT TO 4 TO 1 FLARE.
    1.718      2.87   1460.47       .00       .00   1461.12       .65      2.78       .14   1457.90
   1009.0     483.3     282.9     242.8      80.8      35.8      44.6      89.4     175.2   1457.70
      .89      5.98      7.91      5.44      .049      .042      .049      .000   1457.60   9966.00
  .012746      260.      240.      225.         3         0         0       .00     68.00  10034.00


CCHV=     .300 CEHV=     .500
*SECNO 1.727

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
7487 PROBABLE MINIMUM SPECIFIC ENERGY
```

3893 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1464.10 ELREA= 1464.10

BEGIN SUN VALLEY PARKWAY CULVERTS (4- 10'X 4' RCB'S \ STRUC. #36)
WEIR FLOW OVER MEDIAN TO LEFT BEGINS AT EL. 1466.0 AND TO CHANN.
AT RIGHT AT INVERT EL.=1466

1.727	2.57	1462.17	1462.17	.00	1463.46	1.30	.70	.32	1464.10
1009.0	.0	1009.0	.0	.0	110.5	.0	89.5	175.3	1464.10
.89	.00	9.13	.00	.000	.035	.000	.000	1459.60	9978.50
.015293	50.	50.	50.	20	11	0	.00	43.00	10021.50

1

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

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	2.90	.00	4.00	10.00	147.00	12	3	1460.20	1459.60

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 1.755

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1464.459 EGOC = 1464.526 PCWSE= 1462.169 ELTRD= 1466.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.20

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1464.46	1464.53	1.06	0.	1009.	6.335	160.0	1466.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1466.00 ELREA= 1466.00

END CULVERTS

1.755	3.70	1463.90	.00	.00	1464.53	.62	1.06	.00	1464.70
1009.0	.0	1009.0	.0	.0	159.3	.0	90.0	175.4	1464.70
.89	.00	6.34	.00	.000	.012	.000	.000	1460.20	9978.50
.000564	147.	147.	147.	3	0	0	.00	43.00	10021.50

*SECNO 1.761

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

3470 ENCROACHMENT STATIONS= 9940.0 10068.0 TYPE= 1 TARGET= 128.000
ENCROACHMENT (ET CARD) APPLIED AT THIS SECTION TO LIMIT EFFECTIVE

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      ENCROACHMENT (ET CARD) APPLIED AT THIS SECTION TO LIMIT EFFECTIVE
      FLOW AREA TO 45 DEGREE CONTRACTION ANGLE FROM INLET
    1.761     3.55  1464.55      .00      .00  1464.70      .14      .03      .14  1461.00
   1009.0    217.9    704.6     86.6    105.8    206.1     52.7     90.2    175.5  1462.00
      .90     2.06     3.42     1.64     .048     .035     .048     .000  1461.00  9940.00
  .001251      34.      34.      34.        2        0        0      .00   128.00 10068.00


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 T1      SUN VALLEY PARKWAY NORTH FIS  CONTRACT:FCDMC NO.90-04
 T2      100-YEAR WATER SURFACE PROFILE                    A-N WEST INC.,PHX.AZ.
 T3      WASH #7,100-YEAR FLOODWAY

 J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

     -10        3                          0                                1393.27

 J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     15                 -1

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


 *PROF 2
0

 CCHV=     .100 CEHV=     .300
 *SECNO  .254
 3280 CROSS SECTION       .25 EXTENDED       .27 FEET


 3470 ENCROACHMENT STATIONS=    10050.0   10308.1  TYPE=      1  TARGET=      258.090
       FLOODWAY MODEL UTILIZING FIXED ENCROACHMENT OPTION (METHOD 1) AND
       BASED ON PREVIOUS MODEL USING EQUAL CONVEYANCE REDUCTION (METHOD 4).
       STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
       CROSS-SECTION I. D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM
       ALONG BASELINE FROM CONFLUENCE WITH TRILBY WASH.
       CROSS-SECTIONS ARE CODED FRON LEFT TO RIGHT LOOKING DOWNSTREAM WITH
       STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
       A CONTINUOUS DOMAINATE LOW FLOW CHANNEL WAS NOT EVIDENT BETWEEN
       SEC. 0.2538 AND 1.4450. THEREFORE CHANNEL BANK STATIONS WERE CHOSEN
       ALONG ONE SMALL CHANNEL ALIGNMENT WHICH PROVIDED THE MOST DIRECT
       COURSE TO TRILBY WASH.
     .254     1.77  1393.27      .00  1392.47  1393.42      .15      .00      .00  1392.00
   1248.0       .0    166.0   1082.0       .0     49.8    358.1       .0       .0  1391.70
      .00      .00     3.33     3.02     .000     .045     .049     .000  1391.50 10050.00
  .005483       0.       0.       0.        0        0        0      .00   258.09 10308.09


 *SECNO  .398
 3280 CROSS SECTION       .40 EXTENDED       .37 FEET


 3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .65
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3470 ENCROACHMENT STATIONS=    10220.0   10444.9  TYPE=      1  TARGET=      224.900
      .398      1.77   1398.57   1398.25   1397.92   1398.85       .28      5.39       .04   1397.20
    1248.0        .0     209.1    1038.9        .0      41.2     255.9       5.4       3.7   1397.20
       .04       .00      5.07      4.06      .000      .045      .049      .000   1396.80  10220.00
   .012998      750.      720.      660.        17        15         0       .00    224.90  10444.90


*SECNO  .495
1
   06MAY93      11:51:02                                                                                    PAGE   15


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


3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    10257.7   10470.0  TYPE=      1  TARGET=      212.300
      .495      2.14   1403.74       .00   1402.83   1403.94       .20      5.09       .01   1404.00
    1248.0    1028.7     219.3        .0     282.7      63.8        .0       9.5       6.5 100000.00
       .09      3.64      3.44       .00      .049      .045      .000      .000   1401.60  10257.70
   .006682      500.      540.      630.         2         0         0       .00    206.18  10470.00


*SECNO  .650

3470 ENCROACHMENT STATIONS=    10497.4   10850.0  TYPE=      1  TARGET=      352.600
      .650      1.80   1409.40       .00   1408.71   1409.54       .14      5.59       .01   1408.00
    1248.0    1102.2     145.8        .0     383.6      40.0        .0      16.7      11.7 100000.00
       .16      2.87      3.65       .00      .049      .045      .000      .000   1407.60  10497.40
   .007027      820.      790.      740.         5         0         0       .00    352.60  10850.00


*SECNO  .779
3280 CROSS SECTION       .78 EXTENDED       .04 FEET


3470 ENCROACHMENT STATIONS=    10414.2   11040.0  TYPE=      1  TARGET=      625.800
      .779      2.24   1414.04       .00   1413.06   1414.15       .12      4.61       .00   1412.20
    1248.0    1063.7     184.3        .0     454.2      42.7        .0      23.8      19.4 100000.00
       .23      2.34      4.31       .00      .049      .045      .000      .000   1411.80  10414.20
   .006989      690.      450.      415.         6         0         0       .00    625.80  11040.00


*SECNO  .851

3470 ENCROACHMENT STATIONS=    10488.1   11041.5  TYPE=      1  TARGET=      553.400
      .851      1.67   1417.47       .00   1416.46   1417.66       .19      3.48       .02   1416.10
    1248.0     954.1     293.9        .0     328.2      58.8        .0      27.5      24.3 100000.00
       .26      2.91      5.00       .00      .049      .045      .000      .000   1415.80  10488.10
   .013554      360.      400.      390.         5         0         0       .00    553.40  11041.50


*SECNO 1.005
3280 CROSS SECTION      1.00 EXTENDED       .75 FEET

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


3470 ENCROACHMENT STATIONS=    10392.9   10939.3  TYPE=      1  TARGET=      546.399
     1.005      1.74   1425.34       .00   1424.54   1425.48       .14      7.82       .01   1423.70
    1248.0     968.9     279.1        .0     382.4      66.9        .0      34.6      33.6 100000.00
       .33      2.53      4.17       .00      .049      .045      .000      .000   1423.60  10392.90
   .008330      740.      770.      750.         5         0         0       .00    546.40  10939.30


*SECNO 1.144

3265 DIVIDED FLOW

3280 CROSS SECTION      1.14 EXTENDED       .53 FEET


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


3470 ENCROACHMENT STATIONS=    10456.9   10773.4  TYPE=      1  TARGET=      316.500
        DECREASE DISCHARGE UPSTREAM OF TRIBUTARY.
     1.144      1.83   1432.73       .00   1431.97   1432.96       .22      7.45       .03   1431.50
    1009.0     759.2     249.8        .0     225.1      51.4        .0      40.5      40.6 100000.00
       .39      3.37      4.86       .00      .049      .045      .000      .000   1430.90  10456.90
   .014597      700.      740.      740.         4         0         0       .00    311.05  10773.40


*SECNO 1.206

3470 ENCROACHMENT STATIONS=    10387.0   10666.3  TYPE=      1  TARGET=      279.300
     1.206      2.06   1436.26       .00   1435.50   1436.50       .25      3.54       .01   1434.50
    1009.0     498.7     510.3        .0     185.1     103.8        .0      42.6      42.7 100000.00
       .41      2.69      4.91       .00      .049      .045      .000      .000   1434.20  10387.00
   .009049      320.      300.      290.         3         0         0       .00    279.30  10666.30


*SECNO 1.282

3470 ENCROACHMENT STATIONS=    10249.8   10515.8  TYPE=      1  TARGET=      266.000
     1.282      2.18   1440.28       .00   1439.45   1440.51       .22      4.00       .00   1439.10
    1009.0     679.2     329.8        .0     223.5      65.7        .0      45.3      45.2 100000.00
       .44      3.04      5.02       .00      .049      .045      .000      .000   1438.10  10249.80
   .010420      400.      430.      425.         5         0         0       .00    266.00  10515.80


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


*SECNO 1.377
3280 CROSS SECTION      1.38 EXTENDED       .64 FEET


3470 ENCROACHMENT STATIONS=    10030.4   10240.2  TYPE=      1  TARGET=      209.800
        ENCROACHMENT (ET CARD) APPLIED TO CONTAIN FLOW WITHIN RIDGE  ON LEFT.
     1.377      2.47   1444.93       .00   1444.19   1445.19       .25      4.67       .01   1443.30
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   1.577      2.43   1444.73       .00   1444.18   1445.17       .23      4.87       .01   1443.30
  1009.0     686.2     322.8        .0     204.7      62.5        .0      48.2      47.8 100000.00
     .47      3.35      5.17       .00      .049      .045      .000      .000   1442.50  10030.40
 .010027      470.      430.      400.         5         0         0       .00    209.80  10240.20


*SECNO 1.445

3470 ENCROACHMENT STATIONS=    9842.0   10019.8  TYPE=      1  TARGET=      177.800
   1.445      3.03   1448.53       .00   1447.55   1448.81       .28      3.61       .01   1446.90
  1009.0     741.9     267.1        .0     207.5      46.7        .0      50.4      49.4 100000.00
     .50      3.58      5.72       .00      .049      .042      .000      .000   1445.50   9842.00
 .009424      360.      400.      360.         4         0         0       .00    177.80  10019.80


*SECNO 1.509

3470 ENCROACHMENT STATIONS=    9891.1    9991.1  TYPE=      1  TARGET=      100.000
   1.509      3.03   1451.53       .00   1450.62   1451.91       .38      3.07       .03   1449.30
  1009.0     685.9     323.1        .0     150.8      56.6        .0      52.2      50.4 100000.00
     .52      4.55      5.71       .00      .049      .042      .000      .000   1448.50   9891.10
 .009230      325.      340.      340.         3         0         0       .00    100.00   9991.10


*SECNO 1.555

3470 ENCROACHMENT STATIONS=    9892.5   10049.2  TYPE=      1  TARGET=      156.700
       ET CARD APPLIED TO CONTAIN FLOW WITHIN RIDGE ON LEFT.
   1.555      2.84   1453.24       .00   1452.37   1453.43       .18      1.50       .02   1451.40
  1009.0     638.2     185.9     184.9     197.5      43.9      56.4      53.5      51.1   1451.50
     .54      3.23      4.23      3.28      .049      .042      .049      .000   1450.40   9892.50
 .005056      215.      240.      250.         1         0         0       .00    156.70  10049.20


*SECNO 1.591
1
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


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


3470 ENCROACHMENT STATIONS=    9969.2   10086.0  TYPE=      1  TARGET=      116.800
   1.591      2.12   1454.62       .00   1453.92   1455.11       .49      1.59       .09   1452.80
  1009.0     184.7     278.6     545.7      38.4      39.6     109.1      54.5      51.7   1452.90
     .54      4.81      7.03      5.00      .049      .042      .049      .000   1452.50   9969.20
 .015787      200.      190.      185.         0         0         0       .00    116.80  10086.00


*SECNO 1.630

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


3470 ENCROACHMENT STATIONS=    9900.8   10024.6  TYPE=      1  TARGET=      123.800
   1.630      2.86   1456.96       .00   1455.96   1457.27       .32      2.15       .02   1455.50
  1009.0     552.4     456.5        .0     149.6      85.7        .0      55.6      52.3 100000.00
     .56      3.69      5.32       .00      .049      .042      .000      .000   1454.10   9900.80
 .007409      220.      200.      195.         3         0         0       .00    123.80  10024.60
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*SECNO 1.672

3470 ENCROACHMENT STATIONS=     9917.1   10005.2  TYPE=      1  TARGET=       88.101
     1.672      3.22   1459.02       .00   1458.01   1459.50       .48      2.17       .05   1457.20
    1009.0     675.2     333.8        .0     139.1      49.6        .0      56.8      52.9 100000.00
       .57      4.86      6.73       .00      .049      .042      .000      .000   1455.80   9917.10
   .010700      260.      225.      215.         2         0         0       .00     88.10  10005.20


*SECNO 1.718

3470 ENCROACHMENT STATIONS=     9970.5   10014.0  TYPE=      1  TARGET=       43.500
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EXPANSION DOWNSTREAM OF
        CULVERT TO 4 TO 1 FLARE.
     1.718      3.78   1461.38       .00   1460.47   1462.15       .77      2.57       .09   1457.90
    1009.0     603.9     391.5      13.7      97.2      47.2       4.7      57.8      53.3   1457.70
       .58      6.21      8.29      2.91      .049      .042      .049      .000   1457.60   9970.50
   .009661      260.      240.      225.         1         0         0       .00     43.50  10014.00


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


CCHV=     .300 CEHV=     .500
*SECNO 1.727

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1464.10 ELREA=      1464.10

        BEGIN SUN VALLEY PARKWAY CULVERTS (4- 10'X 4' RCB'S  \ STRUC. #36)
        WEIR FLOW OVER MEDIAN TO LEFT BEGINS AT EL. 1466.0 AND TO CHANN.
        AT RIGHT AT INVERT EL.=1466
     1.727      2.57   1462.17   1462.17   1462.17   1463.46      1.29       .60       .26   1464.10
    1009.0        .0    1009.0        .0        .0     110.5        .0      57.9      53.3   1464.10
       .58       .00      9.13       .00      .000      .035      .000      .000   1459.60   9978.50
   .015272       50.       50.       50.        20        14         0       .00     43.00  10021.50



SPECIAL CULVERT

SC  CUND      CUNV      ENTLC     CDFD      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    4         .012      .20       2.90      .00       4.00      10.00     147.00    12        3         1460.20   1459.60

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

*SECNO 1.755

SPECIAL CULVERT OUTLET CONTROL
EGIC =   1464.459  EGOC =   1464.526  PCWSE=   1462.170  ELTRD=   1466.000
```

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.20

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1464.46	1464.53	1.06	0.	1009.	6.335	160.0	1466.00	0.

1

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1466.00 ELREA= 1466.00

END CULVERTS

1.755	3.70	1463.90	.00	1463.90	1464.53	.62	1.06	.00	1464.70
1009.0	.0	1009.0	.0	.0	159.3	.0	58.4	53.5	1464.70
.59	.00	6.34	.00	.000	.012	.000	.000	1460.20	9978.50
.000564	147.	147.	147.	3	0	0	.00	43.00	10021.50

*SECNO 1.761

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

3470 ENCROACHMENT STATIONS= 9940.0 10068.0 TYPE= 1 TARGET= 128.000
ENCROACHMENT (ET CARD) APPLIED AT THIS SECTION TO LIMIT EFFECTIVE
FLOW AREA TO 45 DEGREE CONTRACTION ANGLE FROM INLET

1.761	3.55	1464.55	.00	1464.55	1464.70	.14	.03	.14	1461.00
1009.0	217.9	704.5	86.6	105.8	206.2	52.7	58.6	53.5	1462.00
.59	2.06	3.42	1.64	.048	.035	.048	.000	1461.00	9940.00
.001250	34.	34.	34.	2	0	0	.00	128.00	10068.00

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THIS RUN EXECUTED 06MAY93 11:52:02

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH NO 7, 100 YEAR PROF

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	.254	1248.00	1392.47	.00	2.19	.00	10050.00	10080.00	.00	.00	9895.08	11196.43
	.254	1248.00	1393.27	.00	3.33	.00	10050.00	10080.00	10050.00	10308.09	10050.00	10308.09
*	.398	1248.00	1397.92	.00	3.77	720.00	10220.00	10245.00	.00	.00	9781.42	11168.40
*	.398	1248.00	1398.57	1398.25	5.07	720.00	10220.00	10245.00	10220.00	10444.90	10220.00	10444.90
*	.495	1248.00	1402.83	.00	2.46	540.00	10425.00	10470.00	.00	.00	9923.68	11217.69
	.495	1248.00	1403.74	.00	3.44	540.00	10425.00	10470.00	10257.70	10470.00	10257.70	10470.00
	.650	1248.00	1408.71	.00	2.80	790.00	10825.00	10850.00	.00	.00	9705.18	10956.48
	.650	1248.00	1409.40	.00	3.65	790.00	10825.00	10850.00	10497.40	10850.00	10497.40	10850.00
	.779	1248.00	1413.06	.00	2.75	450.00	11020.00	11040.00	.00	.00	9421.10	11372.31
	.779	1248.00	1414.04	.00	4.31	450.00	11020.00	11040.00	10414.20	11040.00	10414.20	11040.00
*	.851	1248.00	1416.46	.00	2.88	400.00	11003.30	11041.50	.00	.00	9208.40	11313.27
	.851	1248.00	1417.47	.00	5.00	400.00	11003.30	11041.50	10488.10	11041.50	10488.10	11041.50
*	1.005	1248.00	1424.54	.00	2.62	770.00	10900.00	10939.30	.00	.00	9302.22	11189.01
	1.005	1248.00	1425.34	.00	4.17	770.00	10900.00	10939.30	10392.90	10939.30	10392.90	10939.30
*	1.144	1009.00	1431.97	.00	3.35	740.00	10736.50	10773.40	.00	.00	9495.41	10847.50
*	1.144	1009.00	1432.73	.00	4.86	740.00	10736.50	10773.40	10456.90	10773.40	10456.90	10773.40
*	1.206	1009.00	1435.50	.00	3.35	300.00	10615.00	10666.30	.00	.00	9672.85	10846.86
	1.206	1009.00	1436.26	.00	4.91	300.00	10615.00	10666.30	10387.00	10666.30	10387.00	10666.30
	1.282	1009.00	1439.45	.00	3.97	430.00	10481.60	10515.80	.00	.00	9651.73	10751.42
	1.282	1009.00	1440.28	.00	5.02	430.00	10481.60	10515.80	10249.80	10515.80	10249.80	10515.80
	1.377	1009.00	1444.18	.00	3.80	430.00	10210.10	10240.20	9537.50	10548.10	9539.34	10535.44
	1.377	1009.00	1444.93	.00	5.17	430.00	10210.10	10240.20	10030.40	10240.20	10030.40	10240.20

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	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
	1.445	1009.00	1447.55	.00	4.29	400.00	10000.10	10019.80	.00	.00	9481.93	10085.30
	1.445	1009.00	1448.53	.00	5.72	400.00	10000.10	10019.80	9842.00	10019.80	9842.00	10019.80
	1.509	1009.00	1450.62	.00	4.50	340.00	9967.70	9991.10	.00	.00	9602.79	10026.00
	1.509	1009.00	1451.53	.00	5.71	340.00	9967.70	9991.10	9891.10	9991.10	9891.10	9991.10
	1.555	1009.00	1452.37	.00	3.28	240.00	10000.10	10020.00	9676.60	10272.10	9684.67	10185.02
	1.555	1009.00	1453.24	.00	4.23	240.00	10000.10	10020.00	9892.50	10049.20	9892.50	10049.20
*	1.591	1009.00	1453.92	.00	4.78	190.00	9995.00	10014.90	.00	.00	9823.67	10196.29
*	1.591	1009.00	1454.62	.00	7.03	190.00	9995.00	10014.90	9969.20	10086.00	9969.20	10086.00
	1.630	1009.00	1455.96	.00	3.86	200.00	9989.50	10024.60	.00	.00	9677.52	10094.89
*	1.630	1009.00	1456.96	.00	5.32	200.00	9989.50	10024.60	9900.80	10024.60	9900.80	10024.60
	1.672	1009.00	1458.01	.00	5.40	225.00	9988.30	10005.20	.00	.00	9718.72	10044.08
	1.672	1009.00	1459.02	.00	6.73	225.00	9988.30	10005.20	9917.10	10005.20	9917.10	10005.20
	1.718	1009.00	1460.47	.00	7.91	240.00	10000.00	10012.70	9966.00	10034.00	9966.00	10034.00
	1.718	1009.00	1461.38	.00	8.29	240.00	10000.00	10012.70	9970.50	10014.00	9970.50	10014.00
*	1.727	1009.00	1462.17	1462.17	9.13	50.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	1.727	1009.00	1462.17	1462.17	9.13	50.00	9978.50	10021.50	.00	.00	9978.50	10021.50

*	1.755	1009.00	1463.90	.00	6.34	147.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	1.755	1009.00	1463.90	.00	6.34	147.00	9978.50	10021.50	.00	.00	9978.50	10021.50
*	1.761	1009.00	1464.55	.00	3.42	34.00	9980.00	10040.00	9940.00	10068.00	9940.00	10068.00
*	1.761	1009.00	1464.55	.00	3.42	34.00	9980.00	10040.00	9940.00	10068.00	9940.00	10068.00

WASH NO 7, 100 YEAR PROF

SUMMARY PRINTOUT

	SECND	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	.254	43.50	56.66	1147.85	1.03	2.19	1.68	1393.00	1392.47	.00	1301.36	1391.50	1.03
	.254	.00	165.99	1082.01	.00	3.33	3.02	1393.00	1393.27	.00	258.09	1391.50	1.00
*	.398	547.93	94.18	605.88	2.32	3.77	1.93	1398.20	1397.92	5.45	1386.98	1396.80	1.11
*	.398	.00	209.06	1038.94	.00	5.07	4.06	1398.20	1398.57	5.30	224.90	1396.80	1.02
*	.495	899.10	71.41	277.49	2.25	2.46	1.70	1404.20	1402.83	4.91	867.35	1401.60	1.04
	.495	1028.73	219.27	.00	3.64	3.44	.00	1405.00	1403.74	5.17	206.18	1401.60	1.00
	.650	1132.45	63.67	51.89	1.96	2.80	1.37	1409.00	1408.71	5.88	1193.19	1407.60	1.04
	.650	1102.15	145.85	.00	2.87	3.65	.00	1409.90	1409.40	5.66	352.60	1407.60	1.02
	.779	906.34	63.91	277.74	1.86	2.75	1.63	1413.50	1413.06	4.35	1516.97	1411.80	1.04
	.779	1063.67	184.33	.00	2.34	4.31	.00	1414.00	1414.04	4.64	625.80	1411.80	1.18
*	.851	1076.54	58.22	113.23	2.23	2.88	1.66	1418.00	1416.46	3.40	1655.23	1415.80	1.03
	.851	954.08	293.92	.00	2.91	5.00	.00	1418.10	1417.47	3.43	553.40	1415.80	1.19
*	1.005	863.77	92.31	291.92	1.75	2.62	1.94	1424.60	1424.54	8.08	1261.97	1423.60	1.04
	1.005	968.93	279.07	.00	2.53	4.17	.00	1424.60	1425.34	7.88	546.40	1423.60	1.15
*	1.144	887.44	78.41	43.14	2.70	3.35	2.04	1432.20	1431.97	7.43	1121.29	1430.90	1.02
*	1.144	759.22	249.78	.00	3.37	4.86	.00	1432.20	1432.73	7.39	311.05	1430.90	1.08
*	1.206	426.14	218.71	364.15	1.76	3.35	2.44	1436.30	1435.50	3.53	803.92	1434.20	1.21
	1.206	498.72	510.28	.00	2.69	4.91	.00	1436.30	1436.26	3.53	279.30	1434.20	1.30
	1.282	427.90	149.32	431.78	2.19	3.97	2.80	1440.20	1439.45	3.95	818.77	1438.10	1.14
	1.282	679.18	329.82	.00	3.04	5.02	.00	1440.50	1440.28	4.02	266.00	1438.10	1.19
	1.377	584.32	151.07	273.61	1.95	3.80	2.59	1444.30	1444.18	4.73	896.40	1442.50	1.20
	1.377	686.20	322.80	.00	3.35	5.17	.00	1444.30	1444.93	4.65	209.80	1442.50	1.13
	1.445	838.88	118.60	51.52	2.60	4.29	1.98	1448.30	1447.55	3.37	583.11	1445.50	1.11
	1.445	741.85	267.15	.00	3.58	5.72	.00	1448.70	1448.53	3.59	177.80	1445.50	1.15
	1.509	748.56	159.61	100.83	2.65	4.50	3.15	1450.80	1450.62	3.07	423.21	1448.50	1.13
	1.509	685.90	323.10	.00	4.55	5.71	.00	1452.40	1451.53	3.00	100.00	1448.50	1.03
	1.555	475.33	86.85	446.82	2.03	3.28	2.57	1455.30	1452.37	1.74	500.35	1450.40	1.07
	1.555	638.19	185.87	184.94	3.23	4.23	3.28	1455.30	1453.24	1.72	156.70	1450.40	1.03
*	1.591	330.72	123.97	554.30	2.80	4.78	3.43	1454.70	1453.92	1.55	372.62	1452.50	1.09
*	1.591	184.69	278.64	545.67	4.81	7.03	5.00	1455.30	1454.62	1.37	116.80	1452.50	1.08
	1.630	662.97	195.63	150.40	2.51	3.86	2.45	1456.10	1455.96	2.04	417.37	1454.10	1.10
*	1.630	552.45	456.55	.00	3.69	5.32	.00	1458.70	1456.96	2.34	123.80	1454.10	1.10

	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	1.672	729.34	176.57	103.09	2.95	5.40	2.98	1458.10	1458.01	2.04	325.36	1455.80	1.19
	1.672	675.22	333.78	.00	4.86	6.73	.00	1460.80	1459.02	2.06	88.10	1455.80	1.08
	1.718	483.28	282.90	242.81	5.98	7.91	5.44	1462.90	1460.47	2.46	68.00	1457.60	1.07
	1.718	603.86	391.46	13.68	6.21	8.29	2.91	1462.90	1461.38	2.36	43.50	1457.60	1.09
*	1.727	.00	1009.00	.00	.00	9.13	.00	1464.10	1462.17	1.70	43.00	1459.60	1.00
*	1.727	.00	1009.00	.00	.00	9.13	.00	1464.10	1462.17	.79	43.00	1459.60	1.00
*	1.755	.00	1009.00	.00	.00	6.34	.00	1464.70	1463.90	1.73	43.00	1460.20	1.00
*	1.755	.00	1009.00	.00	.00	6.34	.00	1464.70	1463.90	1.73	43.00	1460.20	1.00
*	1.761	217.86	704.56	86.58	2.06	3.42	1.64	1465.00	1464.55	.65	128.00	1461.00	1.21
*	1.761	217.87	704.55	86.58	2.06	3.42	1.64	1465.00	1464.55	.65	128.00	1461.00	1.21

WASH NO 7, 100 YEAR PROF

SUMMARY PRINTOUT

	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	.254	.00	.00	1392.51	.04	.00	.00	54.03	.00	.97	49.00	45.00	49.00
	.254	.00	.00	1393.42	.15	.00	.00	54.83	.00	1.77	.00	45.00	49.00
*	.398	720.00	7.36	1398.00	.08	5.48	.01	130.20	10.39	1.12	49.00	45.00	49.00
*	.398	720.00	7.36	1398.85	.28	5.39	.04	129.98	5.40	1.77	.00	45.00	49.00
*	.495	540.00	8.89	1402.90	.07	4.90	.00	65.07	17.83	1.23	49.00	45.00	49.00
	.495	540.00	8.89	1403.94	.20	5.09	.01	66.82	9.53	2.14	49.00	45.00	.00
	.650	790.00	7.59	1408.77	.06	5.87	.00	81.58	29.20	1.11	49.00	45.00	49.00
	.650	790.00	7.59	1409.54	.14	5.59	.01	70.27	16.74	1.80	49.00	45.00	.00
	.779	450.00	9.33	1413.12	.05	4.35	.00	57.16	38.86	1.26	49.00	45.00	49.00
	.779	450.00	9.33	1414.15	.12	4.61	.00	69.89	23.80	2.24	49.00	45.00	.00
*	.851	400.00	10.00	1416.54	.08	3.42	.01	178.04	44.13	.66	49.00	45.00	49.00
	.851	400.00	10.00	1417.66	.19	3.48	.02	135.54	27.50	1.67	49.00	45.00	.00
*	1.005	770.00	10.13	1424.59	.05	8.05	.00	72.77	54.80	.94	49.00	45.00	49.00
	1.005	770.00	10.13	1425.48	.14	7.82	.01	83.30	34.65	1.74	49.00	45.00	.00
*	1.144	740.00	9.86	1432.09	.12	7.48	.02	188.90	63.36	1.07	49.00	45.00	49.00
*	1.144	740.00	9.86	1432.96	.22	7.45	.03	145.97	40.54	1.83	49.00	45.00	.00
*	1.206	300.00	11.00	1435.59	.09	3.50	.00	74.56	66.33	1.30	49.00	45.00	49.00
	1.206	300.00	11.00	1436.50	.25	3.54	.01	90.49	42.58	2.06	49.00	45.00	.00
	1.282	430.00	9.07	1439.57	.12	3.97	.01	127.13	70.33	1.35	49.00	45.00	49.00
	1.282	430.00	9.07	1440.51	.22	4.00	.00	104.20	45.29	2.18	49.00	45.00	.00
	1.377	430.00	10.23	1444.28	.10	4.70	.00	91.22	74.58	1.68	49.00	45.00	49.00
	1.377	430.00	10.23	1445.19	.25	4.67	.01	100.27	48.23	2.43	49.00	45.00	.00
	1.445	400.00	7.50	1447.68	.12	3.39	.01	94.56	78.00	2.05	49.00	42.00	49.00
	1.445	400.00	7.50	1448.91	.30	3.44	.01	54.34	50.44	3.03	49.00	42.00	.00

	1.448	400.00	7.30	1448.81	.28	3.61	.01	74.24	30.44	3.03	47.00	42.00	.00
	1.509	340.00	8.82	1450.77	.15	3.09	.01	93.54	80.73	2.12	49.00	42.00	49.00
	1.509	340.00	8.82	1451.91	.38	3.07	.03	92.30	52.18	3.03	49.00	42.00	.00
	1.555	240.00	7.92	1452.46	.09	1.68	.01	59.95	82.77	1.97	49.00	42.00	49.00
	1.555	240.00	7.92	1453.43	.18	1.50	.02	50.56	53.47	2.84	49.00	42.00	49.00
*	1.591	190.00	11.05	1454.11	.18	1.62	.03	127.96	84.40	1.42	49.00	42.00	49.00
*	1.591	190.00	11.05	1455.11	.49	1.59	.09	157.87	54.55	2.12	49.00	42.00	49.00
	1.630	200.00	8.00	1456.09	.12	1.98	.01	73.21	86.04	1.86	49.00	42.00	49.00
*	1.630	200.00	8.00	1457.27	.32	2.15	.02	74.09	55.56	2.86	49.00	42.00	.00

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	SECNO	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	1.672	225.00	7.56	1458.20	.19	2.09	.02	98.24	88.02	2.21	49.00	42.00	49.00
	1.672	225.00	7.56	1459.50	.48	2.17	.05	107.00	56.77	3.22	49.00	42.00	.00
	1.718	240.00	7.50	1461.12	.65	2.78	.14	127.46	89.39	2.87	49.00	42.00	49.00
	1.718	240.00	7.50	1462.15	.77	2.57	.09	96.61	57.75	3.78	49.00	42.00	49.00
*	1.727	50.00	40.00	1463.46	1.30	.70	.32	152.93	89.54	2.57	.00	35.00	.00
*	1.727	50.00	40.00	1463.46	1.29	.60	.26	152.72	57.90	2.57	.00	35.00	.00
*	1.755	147.00	4.08	1464.53	.62	1.06	.00	5.64	90.00	3.70	.00	12.00	.00
*	1.755	147.00	4.08	1464.53	.62	1.06	.00	5.64	58.35	3.70	.00	12.00	.00
*	1.761	34.00	23.53	1464.70	.14	.03	.14	12.51	90.20	3.55	48.00	35.00	48.00
*	1.761	34.00	23.53	1464.70	.14	.03	.14	12.50	58.56	3.55	48.00	35.00	48.00

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SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .398  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .398  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .495  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .851  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.005  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.144  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.144  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.206  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.591  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.591  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.630  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.727  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.727  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.727  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     1.727  PROFILE=  2  CRITICAL DEPTH ASSUMED
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CAUTION SECNO= 1.727 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1.727 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1.727 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO= 1.755 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 1.755 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 1.761 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 1.761 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

1

FLOODWAY DATA, WASH NO 7, 100 YEAR PROF
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.254	258.	408.	3.1	1393.3	1392.5	.8
.398	225.	297.	4.2	1398.5	1397.9	.6
.495	212.	346.	3.6	1403.7	1402.8	.9
.650	353.	424.	2.9	1409.4	1408.7	.7
.779	626.	497.	2.5	1414.1	1413.1	1.0
.851	553.	387.	3.2	1417.5	1416.5	1.0
1.005	546.	449.	2.8	1425.3	1424.5	.8
1.144	316.	276.	3.6	1432.8	1432.0	.8
1.206	279.	289.	3.5	1436.3	1435.5	.8
1.282	266.	289.	3.5	1440.3	1439.5	.8
1.377	210.	267.	3.8	1445.0	1444.2	.8
1.445	178.	254.	4.0	1448.6	1447.6	1.0
1.509	100.	207.	4.9	1451.5	1450.6	.9
1.555	157.	298.	3.4	1453.3	1452.4	.9
1.591	117.	187.	5.4	1454.6	1453.9	.7
1.630	124.	235.	4.3	1457.0	1456.0	1.0
1.672	88.	189.	5.3	1459.0	1458.0	1.0
1.718	43.	149.	6.8	1461.4	1460.5	.9
1.727	43.	111.	9.1	1462.2	1462.2	.0
1.755	43.	159.	6.3	1463.9	1463.9	.0
1.761	128.	365.	2.8	1464.6	1464.6	.0

```
1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.0;  February 1991       *
 *                                        *
 *  RUN DATE    06MAY93    TIME   11:52:33 *
 *****************************************
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*************************************
*  U.S. ARMY CORPS OF ENGINEERS     *
*  HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D       *
*  DAVIS, CALIFORNIA 95616-4687     *
*         (916) 756-1104            *
*************************************
```

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

1

06MAY93 11:52:33 PAGE 1

THIS RUN EXECUTED 06MAY93 11:52:33

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

 Version   4.6.0;  February 1991
***********************************
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T1      SUN VALLEY PARKWAY NORTH FIS. CONTRACT:FCDMC NO.90-04    FILE:WASH8-2
T2      100-YEAR WATER SURFACE PROFILE                A-N WEST INC PX.AZ.
T3      WASH NO 8 100 YEAR PROFILE                    DATE:7-25-91

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC    HVINS     Q        WSEL     FQ

      0        2                 0     .0069                                  1355.8

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN        ALLDC     IBW      CHNIM    ITRACE

      1                 -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     38       43        1        2       26       39       21       22       27       28
     53       54        0       38       13       14       15       55       26       56
     63        1       51        4       42       57        0       38       39       33
      3       10       11       12        5        7        8       16       17       18
      0      200

NC    .049     .049     .045       .1       .3
QT       2     1447     1447
```

```
ET                          9.1                                                   7289.1     7621.26
      FLOODWAY ANALYSIS USING FIXED ENCROACHMENT OPTION (METHOD 1) AND
      BASED ON PREVIOUS ANALYSIS BY EQUAL CONVEYANCE REDUCTION (METHOD 4).
      STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
      CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM
      ALONG BASELINE FROM CONFLUENCE WITH MCMICKEN DAM 100-YR FLOOD POOL EL.
      CROSS -SECTING ARE CODED FOR LEFT TO RIGHT LOOKING DOWNSTREAM WITH
      STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
      A CONTINUOUS DOMAINATE LOW FLOW CHANNEL WAS NOT EVIDENT BETWEEN
      SEC. 0.1136 AND 1.6013. THEREFORE CHANNEL BANK STATIONS WERE CHOSEN
      ALONG ONE SMALL CHANNEL ALIGNMENT WHICH PROVIDED THE MOST DIRECT
1
  06MAY93      11:52:33                                                                    PAGE    2


      COURSE TO THE MCMICKEN DAM FLOODPOOL.
X1   0.1136       80     7289.1    7333.3        0         0         0
GR   1357.1     4620     1356.1      4650   1356.1      4658    1356.9      4670    1357.0      5000
GR   1357.8     5350     1356.0      5800   1355.8    5862.5    1355.8    5883.5    1355.8    5891.0
GR   1355.8   5899.8     1355.8    5910.2   1355.9    5931.0    1356.1    5951.1    1356.1    6004.1
GR   1355.2   6209.5     1356.1    6252.0   1356.2    6284.3    1356.1    6299.4    1355.8    6446.0
GR   1354.5   6716.9     1354.7    6742.7   1354.9    6757.2    1354.5    6769.0    1355.8    6863.6
GR   1355.5   6877.0     1355.3    6888.3   1355.6    6898.6    1355.9    6909.7    1356.0    7001.6
GR   1355.9   7033.9     1355.8    7066.0   1355.6    7180.1    1355.5    7289.1    1354.2    7302.6
GR   1354.3   7309.2     1355.4    7333.3   1355.8    7679.9    1356.0    7691.1    1355.2      7850
GR   1355.2     7870     1355.7      8150   1355.7    8245.7    1355.0    8326.0    1355.2    8338.0
GR   1355.9   8722.9     1355.6    8728.6   1355.6    8735.0    1356.1    8809.1    1356.2    8838.5
GR   1355.6   8980.9     1355.5    8985.3   1355.8    8995.3    1355.7    8999.4    1355.7    9003.4
GR   1356.1   9073.8     1356.1    9101.1   1356.1    9110.5    1356.0    9118.4    1356.1    9124.6
GR   1356.2   9452.6     1356.1    9464.5   1356.1    9478.0    1356.1    9492.9    1356.1    9505.3
GR   1356.0   9698.5     1355.4    9725.9   1356.0    9782.9    1356.0    9789.4    1356.2    9796.8
GR   1356.0   9801.1     1355.9    9804.9   1355.9    9810.2    1355.8    9816.4    1356.2    9978.8
GR   1354.3    10000     1354.3     10010   1356.0     10025      1356    10130    1356.8     10140

ET                          9.1                                                   7142.8     7463.8
X1   0.2652       88     7371.7    7463.8      1240       800      1070
GR   1365.0   4702.7     1364.2    4710.0   1364.4    4715.6    1364.8    4733.3    1364.9    4753.9
GR   1364.1   4920.6     1364.2    4973.8   1364.8    5195.5    1364.2    5293.8    1363.3    5426.4
GR   1363.3   5441.2     1363.0    5558.5   1362.6    5626.7    1362.5    5651.2    1362.6    5663.3
GR   1362.4   5671.2     1362.6    5673.4   1362.7    5687.0    1362.4    5745.2    1362.5    5807.2
GR   1362.4   5914.0     1362.4    5931.2   1362.6    6048.4    1362.4    6064.6    1362.3    6075.9
GR   1363.4   6255.1     1363.4    6267.8   1363.7    6285.0    1363.8    6394.6    1364.0    6411.2
GR   1364.2   6516.0     1364.0    6697.3   1364.2    6776.6    1362.8    6975.8    1362.8    6989.8
GR   1362.8   6995.8     1362.8    6999.8   1362.8    7001.6    1362.8    7014.0    1362.8    7025.4
GR   1362.8   7371.7     1362.3    7404.0   1362.3    7415.3    1362.7    7463.8    1362.5    7775.9
GR   1362.4   7804.0     1362.4    7814.8   1362.4    7851.5    1362.4    7856.8    1362.4    7916.9
GR   1363.2   8135.9     1363.4    8164.9   1363.8    8323.5    1363.8    8352.4    1363.2    8380.8
GR   1363.4   8626.3     1363.7    8645.8   1364.0    8652.6    1364.0    8663.6    1364.1    8672.4
GR   1364.0     8880     1363.5    9110.6   1363.5    9215.5    1362.5    9228.8    1362.7    9232.2
GR   1364.0   9363.6     1364.0    9379.7   1364.0    9453.9    1364.1    9573.8    1364.1    9594.4
GR   1364.1   9628.3     1363.9    9675.5   1364.2    9778.2    1364.2    9801.9    1364.8    9850.1
GR   1363.9   9879.3     1364.9    9934.4   1364.2    9966.8    1362.0      9980    1362.1      9990
GR   1364.1    10000     1364.9   10056.4   1364.6   10065.1    1364.6   10070.8    1364.7   10074.4
GR   1364.7  10079.7     1364.2   10086.2   1364.2     10120

ET                          9.1                                                   7183.7     7500.0
X1   0.3620       91     7393.7      7450       625       480       480
GR   1370.0   4497.9     1368.8    4691.8   1367.9    4962.6    1368.5    5017.9    1367.9    5036.0
GR   1368.1   5073.4     1367.8    5084.2   1367.8    5133.2    1368.3    5169.7    1367.7    5176.6
GR   1368.4   5220.1     1367.8    5234.0   1368.2    5290.2    1368.2    5317.3    1368.0    5332.0
GR   1367.9   5514.9     1368.3    5808.0   1368.0    5848.2    1368.4    5905.3    1368.1    6055.7
GR   1367.1   6071.8     1367.2    6087.0   1368.1    6106.9    1368.2    6186.1    1368.0    6188.3
GR   1368.3   6189.7     1368.0    6190.7   1368.1    6199.1    1367.5    6374.2    1367.5    6389.6
GR   1367.5   6406.4     1368.0    6457.4   1367.9    6494.1    1368.0    6517.5    1367.9    6637.7
GR   1367.5   6749.8     1367.8    6754.2   1367.5    6761.0    1367.9    6830.6    1367.7    6898.6
GR   1367.8   6898.6     1367.9    6983.6   1368.0    7005.8    1368.2    7023.4    1368.3    7080.3
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GR	1367.4	7295.8	1367.7	7353.7	1367.0	7415.8	1367.0	7422	1367.5	7450
GR	1367.5	7601.9	1367.5	7828.6	1367.7	7841.7	1367.9	8028.3	1367.9	8038.6
GR	1367.7	8135.3	1368.0	8320	1368.9	8769.7	1368.0	9019.6	1368.0	9032.9

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GR	1367.6	9193.5	1367.6	9202.2	1367.9	9351.9	1368.0	9498.6	1368.0	9499.3
GR	1368.0	9500.6	1368.0	9516.9	1368.0	9531.4	1368.0	9622.9	1368.9	9707.1
GR	1368.9	9727.5	1369.5	9738.7	1369.7	9748.5	1369.8	9778.2	1369.3	9834.1
GR	1369.9	9883.0	1379.0	9892.9	1370.1	9908.4	1370.1	9935.7	1370.0	9959.1
GR	1370.0	9964.3	1370	10000	1367.0	10002	1367.0	10010	1369	10025
GR	1369.3	10050	1369.5	10090	1369.5	10110	1370.0	10115	1370.0	10125
GR	1370.0	10140								

ET			9.1						7346.8	7880.6
X1	0.4735	64	7725	7780.6	425	525	420			
GR	1372.5	5000	1372.0	5250	1371.4	5600	1372.0	5750	1371.3	6000
GR	1371.9	6150	1371.2	6300	1372.0	6380	1371.2	6420	1371.3	6450
GR	1371.3	6800	1372.0	6845	1372.0	6970	1371.3	7000	1372.0	7220
GR	1372.0	7480.8	1371.8	7508.0	1372.0	7626.3	1372.0	7725	1371.0	7740
GR	1370.8	7758.9	1372.0	7780.6	1372.2	7792.5	1372.0	7840.0	1371.1	7945.7
GR	1371.1	7965.7	1371.0	7996.0	1371.0	8011.5	1371.1	8045.3	1371.4	8255.9
GR	1372.0	8342.1	1372.0	8354.2	1372.0	8382.1	1372.2	8459.2	1372.0	8492.8
GR	1371.7	8523.6	1371.6	8538.6	1371.6	8549.3	1371.3	8569.3	1371.8	8579.9
GR	1371.8	8590.6	1372.0	8729.6	1372.4	8816.9	1372.4	8894.8	1372.0	9073.9
GR	1371.8	9087.1	1372.0	9095.3	1372.3	9123.6	1372.0	9148.8	1372.0	9170.4
GR	1371.5	9356.0	1371.5	9412.8	1371.4	9536.4	1371.4	9599.6	1371.9	9735.2
GR	1373.0	9962.0	1371.8	9970	1371.8	9985	1373.1	10000	1373.0	10025
GR	1372.8	10030	1373.1	10040	1374.0	10120	1375.8	10270		

ET			9.1						8075	8400
X1	0.6231	83	8357.5	8400	390	430	410			
GR	1376.3	5549.7	1376.0	5650	1375.6	5670	1375.4	5680	1375.9	5688.0
GR	1375.7	5744.2	1375.9	5927.4	1376.0	5999.5	1375.7	6054.0	1375.8	6086.9
GR	1375.8	6111.5	1375.4	6194.8	1375.5	6254.0	1375.8	6336.7	1375.3	6340.7
GR	1376.1	6388.4	1375.8	6415.2	1376.5	6473.8	1376.5	6573.4	1376.0	6787.5
GR	1375.5	6880.8	1374.8	6989.0	1374.5	6994.6	1375.2	7024.8	1376.2	7126.2
GR	1376.0	7162.0	1375.9	7231.5	1375.9	7237.0	1375.4	7312.7	1375.7	7367.5
GR	1375.7	7529.8	1375.7	7602.5	1375.3	7677.9	1375.3	7691.2	1375.9	7785.9
GR	1376.0	7799.1	1376.3	7897.1	1376.3	7988.3	1376.4	8013.1	1376.2	8058.8
GR	1375.9	8114.2	1375.7	8154.2	1375.5	8357.5	1374.0	8360	1374.0	8380
GR	1375.5	8400	1375.9	8489.9	1376.0	8504.5	1375.7	8538.6	1375.7	8588.1
GR	1375.4	8639.7	1375.2	8707.1	1376.0	8795.7	1375.9	8832.8	1375.7	8883.2
GR	1375.9	9023.9	1375.8	9047.1	1375.7	9069.8	1375.6	9081.3	1375.4	9166.8
GR	1375.7	9200.8	1375.7	9504.3	1376.0	9634.6	1376.2	9655.4	1375.9	9691.1
GR	1376.1	9801.4	1375.9	9825.6	1375.9	9914.0	1376.0	9933.7	1376.1	9944.4
GR	1375.9	9950.6	1376.2	9955.6	1375.7	9979.2	1375.4	10002.1	1376.3	10009.8
GR	1377.0	10036.0	1376.1	10052.7	1376.0	10057.5	1376.0	10061.6	1376.7	10164.9
GR	1378.1	10264.9	1378.4	10285.1	1379.4	10332.4				

ET			9.1						8750	9073
X1	0.7727	87	9032.7	9073.4	600	600	600			
GR	1382.1	6250	1380.0	6270	1378.8	6290	1378.8	6300	1380.0	6310
GR	1381.5	6350	1382.0	7258.2	1381.6	7273.4	1381.1	7280.5	1381.5	7285.2
GR	1380.9	7402.7	1381.9	7440.9	1381.0	7487.5	1380.7	7532.9	1381.2	7567.0
GR	1381.8	7693.5	1381.2	7709.6	1381.8	7716.2	1381.2	7810.6	1381.4	7869.2
GR	1380.9	7887.0	1381.9	8032.2	1381.2	8075.4	1381.8	8089.1	1381.8	8479.3
GR	1382.0	8556.8	1381.5	8630.2	1380.7	8655.9	1381.1	8662.6	1380.9	8670.2
GR	1381.4	8680.6	1380.9	8704.2	1381.2	8725.3	1380.9	8742.0	1380.5	8746.4
GR	1381.1	8751.5	1380.5	8779.6	1381.2	8865.2	1380.9	8879.2	1381.8	8917.2

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GR	1381.6	8946.7	1382.0	9000.7	1381.9	9011.7	1380.8	9032.7	1378.6	9037.0

GR	1378.8	9045.9	1379.0	9053.3	1379.3	9058.3	1380.0	9070.4	1382.1	9114.1
GR	1382.1	9124.7	1382.2	9131.9	1382.3	9165.2	1382.2	9190.9	1382.2	9254.4
GR	1382.1	9571.5	1382.1	9610.3	1382.7	9652.7	1382.1	9679.1	1381.9	9726.7
GR	1381.5	9744.2	1381.6	9761.4	1381.8	9768.2	1382.0	9860.4	1381.9	9927.3
GR	1379.9	9933.6	1380.0	9941.4	1381.5	9948.3	1381.4	9998.3	1380.4	10000.1
GR	1379.6	10013.3	1379.5	10024.7	1381.0	10067.3	1380.4	10089.8	1380.4	10094.5
GR	1381.9	10099.3	1381.8	10216.6	1380.9	10228.0	1381.3	10232.1	1381.9	10255.4
GR	1382.2	10306.1	1382.4	10317.4	1382.6	10357.6	1382.7	10362.2	1382.8	10379.0
GR	1383.5	10526.8	1384.0	10559.8						

ET			9.1						9245.6	9580.1
X1	0.8930	91	9547.1	9580.1	370	400	370			
GR	1385.7	6685.7	1384.0	6776.0	1383.8	6781.1	1383.8	6790.0	1385.1	6813.3
GR	1385.3	6822.6	1385.0	6892.0	1385.0	6901.7	1385.2	6957.5	1384.8	7006.0
GR	1385.2	7017.3	1385.0	7064.6	1385.3	7108.9	1384.8	7132.1	1385.2	7158.7
GR	1385.0	7167.1	1385.3	7190.0	1384.8	7228.1	1385.3	7320.2	1385.0	7329.8
GR	1385.3	7338.1	1385.6	7368.5	1385.0	7385.4	1386.1	7543.6	1385.7	7573.0
GR	1386.4	7607.2	1385.8	7854.5	1385.6	8009.4	1385.1	8203.6	1384.6	8212.1
GR	1385.0	8229.1	1385.4	8234.2	1385.0	8294.1	1385.0	8399.2	1384.5	8467.0
GR	1385.0	8516.2	1384.7	8538.5	1385.0	8550.0	1385.3	8590.0	1385.3	8706.4
GR	1384.9	8719.9	1385.4	8743.5	1385.6	8840.8	1385.4	8900.5	1385.5	8944.1
GR	1385.3	8990.0	1384.8	9000.1	1384.4	9139.4	1384.4	9212.3	1385.1	9259.7
GR	1385.0	9449.3	1385.4	9529.1	1385.7	9547.1	1383.0	9549.9	1383.0	9564.7
GR	1385.5	9580.1	1385.0	9594.7	1386.2	9686.0	1385.9	9723.1	1386.0	9781.8
GR	1385.4	9808.0	1386.3	9922.7	1385.6	9972.9	1384.6	9977.9	1385.7	9987.2
GR	1386.4	9996.6	1383.2	10000.0	1383.2	10000.1	1383.2	10005.8	1386.1	10019.3
GR	1385.0	10021.5	1385.1	10041.0	1387.0	10043.6	1386.5	10051.3	1386.6	10080.7
GR	1386.2	10091.2	1385.7	10106.0	1385.7	10115.2	1385.5	10119.1	1385.9	10125.5
GR	1386.7	10259.7	1386.1	10312.8	1387.0	10361.0	1386.0	10472.4	1386.0	10512.8
GR	1386.7	10566.9	1386.2	10580.0	1386	10671.5	1385.0	10690.0	1385.0	10710.7
GR	1386.1	10782.5								

ET			9.1						9673.1	9952.9
X1	1.0161	91	9920.9	9952.9	380	450	450			
GR	1390.2	7157.2	1388.0	7205	1388.2	7215	1389.9	7230	1389.8	7329.7
GR	1389.9	7409.3	1389.8	7435.7	1389.8	7443.9	1389.7	7499.0	1389.7	7532.2
GR	1389.7	7601.2	1389.7	7611.5	1389.7	7621.0	1389.7	7681.4	1390.0	7692.0
GR	1389.7	7699.1	1390.0	7707.3	1390	7753.1	1390	7854.2	1389.9	7981.3
GR	1389.9	7992.7	1390	8114.0	1390	8169.3	1389.5	8200	1390.2	8264.1
GR	1390	8301.1	1389.9	8329.2	1390	8368.2	1390.0	8376.8	1390.2	8388.2
GR	1390.0	8402.3	1390	8432.9	1389.9	8457.6	1389.9	8467.6	1389.9	8532.2
GR	1389.5	8541.4	1389.8	8548.8	1389.9	8560.1	1390.0	8617.3	1390	8670.2
GR	1389.9	8803.4	1389.6	8833.1	1389.9	8842.5	1389.5	8880.6	1389.8	8907.4
GR	1390	9013.2	1390	9026.0	1389.8	9187.4	1389.5	9337.2	1389.9	9515.9
GR	1390	9609.7	1389.2	9694.2	1389.6	9704.8	1389.6	9719.4	1389.6	9732.0
GR	1389.9	9748.5	1389.9	9757.6	1390.0	9853.1	1390.4	9862.3	1390.0	9888.5
GR	1390	9895.8	1389.4	9910.5	1388.5	9920.9	1387.7	9927.4	1387.7	9949.9
GR	1389.8	9952.9	1390.3	9962.5	1389.6	9967.1	1389.8	10000.0	1390.1	10083.9
GR	1390.2	10093.3	1390.1	10098.3	1390.9	10169.5	1390.1	10233.6	1390.6	10241.2
GR	1390.2	10250.8	1391.2	10374.1	1390.8	10406.3	1391.2	10430.6	1390.8	10511.4
GR	1390.3	10533.9	1390.0	10547.8	1390.5	10643.4	1390.7	10738.9	1390.3	10751.7
GR	1390.7	10798.8	1390.9	10886.0	1390.0	10960	1389.7	11000	1389.7	11030
GR	1391.7	11230								

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ET			9.1						9488.8	10137.5
X1	1.0938	72	10077.3	10137.5	425	330	450			
GR	1394.2	7448.7	1393.8	7518.1	1393.8	7530.7	1393.8	7550.0	1393.9	7681.0
GR	1393.7	7813.9	1393.7	7848.0	1393.6	7857.3	1393.6	7871.2	1393.6	7880.0
GR	1393.6	7901.2	1393.6	7967.2	1394.0	8001.2	1394.1	8090.0	1393.7	8220.3
GR	1393.7	8231.4	1393.7	8264.7	1393.7	8277.4	1393.8	8291.7	1393.7	8433.2
GR	1393.7	8447.1	1394.0	8483.8	1394.0	8555.1	1393.8	8647.2	1393.8	8656.4
GR	1393.8	8712.7	1393.9	8745.2	1393.9	8780.7	1393.9	8841.3	1393.8	8769.7

GR	1394.0	8985.5	1393.9	9014.1	1392.9	9083.0	1393.9	9243.7	1394.0	9445.4
GR	1392.2	9480	1392.2	9510	1394.0	9519.2	1394.5	9559.0	1394.4	9833.0
GR	1394.3	9905.6	1394.2	9978.8	1394.1	9999.4	1394.3	10026.1	1394.0	10077.3
GR	1393.5	10086.5	1393.5	10107.5	1394.1	10137.5	1394.5	10242.8	1394.1	10249.4
GR	1394.2	10254.0	1395.0	10272.2	1394.1	10360.2	1394.4	10389.7	1394.1	10419.8
GR	1394.4	10430.1	1394.2	10507.5	1394.8	10541.8	1394.3	10552.3	1395.2	10579.0
GR	1395.2	10587.4	1394.7	10608.0	1394.9	10690.7	1394.1	10731.0	1394.7	10767.5
GR	1394.1	10821.2	1394.5	10835.6	1394.0	10860.1	1394.2	10883.0	1393.9	10893.6
GR	1395.2	10966.2	1395.8	11002.0						
ET			9.1						9550	10192.9
X1	1.1771	75	10121.2	10192.9	480	520	450			
GR	1401.8	7771.5	1400.6	7903.8	1400.1	7933.0	1400.0	7942.9	1398.7	7952.6
GR	1398.7	7954.7	1400.3	7956.0	1400.3	7963.5	1400.4	7976.2	1400.2	8043.9
GR	1400.2	8074.5	1400.3	8207.6	1400.3	8442.0	1400.1	8477.8	1400.3	8678.0
GR	1400.3	8745.5	1400.3	8909.3	1400.2	8947.7	1400.0	8992.6	1400.0	9009.1
GR	1399.9	9150.8	1399.9	9171.8	1398.9	9197.1	1398.9	9207.4	1399.9	9210.9
GR	1399.7	9229.7	1399.8	9235.8	1399.6	9249.6	1399.5	9315.8	1399.0	9343.5
GR	1399.1	9350.1	1399.1	9355.4	1399.1	9389.9	1399.1	9403.2	1399.1	9422.3
GR	1399.1	9574.0	1399.1	9589.7	1399.1	9617.9	1400.0	9690.9	1400.2	9707.3
GR	1400.0	9744.0	1400.9	9788.7	1398.9	9912.0	1399.2	9935.5	1399.2	9972.8
GR	1399.8	10096.3	1399.2	10113.7	1399.5	10121.2	1398.8	10137.7	1398.8	10152.9
GR	1400.0	10192.9	1400.3	10297.7	1400.0	10304.9	1400.4	10373.1	1400.1	10398.2
GR	1400.5	10485.4	1400.5	10499.9	1400	10551.9	1400	10558.6	1400.3	10586.2
GR	1399.8	10607.3	1400.0	10613.1	1400.0	10622.3	1399.8	10638.9	1399.6	10673.6
GR	1399.6	10680.8	1399.8	10687.7	1400.4	10723.5	1401.8	10772.1	1401.3	10788.3
GR	1400.9	10803.6	1401.2	10843.5	1400.9	10855.2	1400.9	10886.5	1402.6	10950.1
ET			9.1						9645	10015.7
X1	1.2850	61	9965.3	10015.7	540	590	590			
GR	1408.7	8032.7	1408.2	8045.9	1408.2	8056.1	1408.1	8062.3	1408.0	8114.6
GR	1407.9	8210.0	1406.0	8275.4	1405.5	8300.1	1405.5	8320.5	1406.0	8340.6
GR	1406.3	8520.7	1406.4	8550.0	1406.5	8781.0	1406.6	8850.8	1406.5	8897.0
GR	1406.0	9066.1	1406.0	9121.6	1406.0	9132.4	1405.9	9158.8	1405.9	9188.3
GR	1405.8	9335.1	1405.8	9390.9	1405.7	9414.6	1405.7	9418.3	1405.7	9422.6
GR	1405.7	9428.3	1405.4	9431.8	1405.9	9436.5	1405.6	9441.6	1405.6	9444.6
GR	1405.9	9467.0	1406.0	9532.7	1406.1	9574.6	1406.0	9584.5	1406.0	9597.2
GR	1406.0	9787.1	1406.0	9828.8	1406.3	9893.4	1406.3	9902.7	1406.1	9965.3
GR	1405.5	9976.4	1405.5	9984.0	1405.5	10000.1	1405.9	10008.1	1406.1	10015.7
GR	1406.6	10083.8	1406.6	10091.9	1406.4	10106.2	1407.0	10139.3	1406.5	10193.6
GR	1406.9	10208.5	1406.4	10213.3	1406.9	10334.5	1406.2	10355.2	1406.4	10406.1
GR	1406.7	10437.6	1406.7	10452.8	1406.8	10505.4	1406.3	10523.5	1406.3	10531.6
GR	1408	10680								

ET			9.1						9750.9	10000.0
X1	1.3750	62	9874.7	9941.0	520	500	620			
GR	1414.6	8278.3	1414.0	8358.5	1413.8	8361.3	1413.6	8378.9	1413.4	8398.6
GR	1412.3	8510.7	1411.9	8552.4	1411.9	8566.4	1411.9	8623.9	1411.9	8632.1
GR	1411.9	8647.4	1411.9	8654.1	1411.9	8671.6	1412.1	8715.7	1412.6	8729.3
GR	1412.6	8796.8	1412.6	8940.1	1412.5	9010.8	1412.5	9026.0	1412.1	9055.2
GR	1412.1	9324.1	1412.3	9335.8	1412.1	9354.0	1412.1	9434.4	1412.1	9488.3
GR	1412.1	9529.2	1412.0	9536.1	1412.3	9556.3	1412.1	9572.8	1412.1	9582.2
GR	1412.0	9733.9	1412.1	9739.6	1412.2	9746.0	1412.1	9787.3	1412.1	9808.5
GR	1412.2	9864.7	1412.2	9874.7	1411.7	9882.8	1411.7	9891.0	1411.8	9921.7
GR	1412.1	9941.0	1412.1	9949.7	1412.8	10085.6	1412.3	10099.1	1412.4	10117.1
GR	1412.7	10169.4	1412.5	10182.1	1412.0	10211.7	1412.4	10265.6	1412.3	10273.6
GR	1412.2	10380.5	1412.2	10389.0	1412.3	10426.4	1412.2	10460.4	1412.6	10472.4
GR	1412.7	10517.8	1412.8	10525.4	1412.8	10533.4	1412.9	10540.1	1413.6	10560.8
GR	1413.9	10598.3	1414.0	10625.0						
DT	2	1271	1271							
ET		7.1	9.1				8981.4	10284.1	10027.9	10248.2

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        DECREASE DISCHARGE.
        ET CARDS APPLIED AT SECS. 1.4953 TO 2.112 TO BLOCK INEFFECTIVE FLOW
        SEPARATED BY RIDGE ON LEFT SIDE (LOOKING DOWNSTREAM).
X1    1.4953        65    10216.4    10248.2       640       625       690
GR    1420.0    8423.2     1418.4     8479.3    1418.6    8488.7    1418.3    8504.0    1418.1    8512.9
GR    1418.6    8564.6     1419.9     8602.3    1420.2    8619.0    1420.0    8665.4    1419.8    8682.0
GR    1419.9    8690.4     1420.0     8705.8    1420.0    8718.4    1420.3    8729.7    1420.2    8750.1
GR    1419.5    8846.2     1419.3     8872.0    1420.4    8981.4    1420.2    8992.1    1419.0    9049.0
GR    1419.0    9059.8     1419.0     9090.1    1419.0    9096.5    1419.0    9119.6    1419.0    9125.0
GR    1420.1    9213.9     1420.0     9222.4    1419.8    9230.2    1420.3    9259.6    1420.0    9331.1
GR    1420.0    9372.4     1420.0     9392.4    1419.8    9399.7    1419.8    9404.1    1419.7    9407.7
GR    1419.6    9467.1     1419.6     9486.3    1419.9    9525.9    1419.9    9535.6    1420.0    9559.7
GR    1419.7    9740.1     1419.8     9752.9    1420.1    9797.2    1420.0    9864.7    1420.2    9883.3
GR    1419.9    9976.7     1420.3    10000.1    1420.3   10021.9    1420.1   10031.5    1419.9   10060.7
GR    1419.9   10067.6     1419.9    10075.8    1419.7   10092.6    1419.7   10117.5    1419.7   10128.2
GR    1418.7   10138.2     1419.7    10152.8    1419.4   10181.0    1419.6   10200.3    1419.1   10206.5
GR    1418.5   10216.4     1418.1    10226.9    1418.0   10236.2    1419.7   10248.2    1420.3   10284.1

NC     .049      .049       .042
GT        2      1096       1096
ET                 7.1        9.1                                   9436.1   10180.4      9910      10000
        DECREASE DISCHARGE.
X1    1.6013        72     9918.9     9990.7       580       600       600
GR    1426.2    8558.0     1426.1     8568.7    1426.0    8577.9    1425.8    8600.8    1425.5    8612.1
GR    1425.4    8620.3     1425.4     8630.0    1425.2    8641.7    1425.5    8648.1    1426.0    8672.1
GR    1426.3    8702.3     1426.2     8714.7    1426.0    8749.2    1425.8    8768.4    1426.0    8779.6
GR    1425.9    8790.4     1426.0     8801.1    1426.1    8828.8    1426.1    8850.7    1426.1    8876.9
GR    1425.9    8888.2     1425.8     8899.3    1425.7    8910.5    1425.8    8919.6    1426.0    8931.1
GR    1424.9    9040.6     1424.4     9065.9    1424.2    9083.5    1423.9    9103.9    1423.9    9140.1
GR    1424.2    9151.9     1424.3     9171.4    1424.5    9181.6    1424.4    9201.5    1424.3    9211.4
GR    1424.5    9293.6     1424.5     9305.2    1424.6    9334.3    1424.7    9342.5    1425.9    9388.7
GR    1425.8    9402.4     1426.1     9428.1    1426.7    9436.1    1426.0    9469.4    1425.5    9537.0
GR    1425.5    9549.5     1425.5     9553.7    1426.1    9565.7    1426.1    9578.8    1426.0    9590.4
GR    1426.1    9756.0     1425.9     9788.4    1425.9    9804.9    1425.9    9811.1    1426.1    9818.1
GR    1426.1    9825.9     1426.1     9838.3    1426.2    9860.8    1425.8    9905.3    1425.7    9918.9
1
   06MAY93      11:52:33                                                                          PAGE    7


GR    1425.3    9942.8     1425.3     9951.3    1425.3    9958.1    1424.2    9965.3    1425.2    9975.6
GR    1425.9    9990.7     1425.9     9997.5    1425.9   10000.0    1425.9   10000.1    1426.0   10009.2
GR    1426.3   10080.1     1428.0    10180.4

ET                 7.1        9.1                                   9369.3   10040.0      9874.1   10000.5
X1    1.6676        66     9945.7    10000.5       480       340       390
GR    1434.0    8771.1     1432.4     8847.7    1431.5    8872.1    1430.9    8888.8    1430.7    8918.8
GR    1430.7    8923.7     1430.6     8927.8    1430.6    8933.1    1430.6    8944.4    1430.6    8955.3
GR    1432.1    8975.2     1431.9     9067.8    1430.6    9081.2    1430.7    9092.5    1431.0    9107.7
GR    1430.7    9117.2     1431.5     9134.3    1431.9    9142.6    1431.9    9152.0    1432.0    9160.1
GR    1432.3    9203.1     1431.2     9233.0    1432.0    9239.9    1432.0    9245.1    1433.0    9250.4
GR    1432.0    9261.9     1431.9     9273.7    1431.3    9306.2    1432.0    9316.9    1433.0    9369.3
GR    1432.2    9389.1     1432.5     9446.1    1432.2    9488.7    1431.9    9497.8    1431.8    9503.1
GR    1432.2    9516.5     1432.0     9615.4    1431.8    9626.8    1431.8    9630.1    1431.8    9635.5
GR    1432.0    9654.3     1432.0     9702.3    1431.9    9773.3    1431.0    9779.1    1431.0    9779.1
GR    1431.1    9782.9     1431.3     9790.2    1431.7    9796.5    1431.9    9805.4    1431.6    9815.0
GR    1431.6    9819.5     1432.1     9838.9    1432.2    9858.5    1432.6    9865.0    1432.0    9873.0
GR    1431.9    9879.4     1431.9     9887.5    1432.2    9893.1    1432.1    9900.1    1432.2    9907.0
GR    1432.0    9945.7     1431.0     9980.4    1431.0   10000.0    1431.9   10000.5    1432.2   10029.0
GR    1433.2   10040.0

ET                 7.1        9.1                                   9532.6   10142.1      9800      9940
X1    1.7301        75     9912.3     9937.3       200       350       320
GR    1437.3    8700.0     1436.0     8758.7    1436.0    8780.6    1435.0    8791.6    1434.3    8814.7
GR    1434.2    8819.7     1434.2     8825.8    1435.1    8837.3    1436.0    8847.3    1436.1    8859.8
GR    1436.1    8985       1434.6     9017.6    1434.6    9026.2    1436.0    9036.7    1436.1    9049.4
GR    1436.0    9155.4     1434.9     9186.2    1434.9    9192.3    1434.9    9195.9    1435.1    9196.2
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GR	1436.0	9212.2	1436.8	9309.7	1435.2	9329.3	1435.3	9337.0	1436.0	9346.8
GR	1436.1	9351.1	1436.0	9358.0	1436.1	9366.7	1436.1	9376.2	1436.0	9384.6
GR	1436.0	9497.8	1436.5	9532.6	1435.9	9542.1	1435.8	9582.4	1435.5	9593.7
GR	1435.5	9605.6	1435.6	9610.0	1435.8	9615.5	1436.0	9619.7	1436.0	9627.9
GR	1435.9	9676.7	1435.9	9745.9	1434.4	9765.9	1434.2	9781.2	1434.2	9786.9
GR	1434.4	9795.8	1435.6	9841.6	1435.6	9865.2	1436.0	9887.3	1436.0	9896.0
GR	1435.6	9907.7	1435.6	9912.3	1435.4	9921.6	1435.3	9931.3	1435.8	9937.3
GR	1435.9	9946.6	1436.1	9985.8	1435.6	9993.1	1435.6	10000.0	1436.2	10003.7
GR	1436.0	10006.5	1436.0	10014.0	1435.7	10022.9	1435.7	10033.0	1435.7	10041.0
GR	1435.7	10047.6	1435.7	10058.3	1436.0	10067.6	1436.1	10079.3	1436.1	10092.7
GR	1437.0	10105.0	1437.7	10116.8	1438.0	10126.6	1438.4	10135.9	1438.5	10142.1
ET		7.1	9.1				9592.5	10215.6	9864.3	9985.5
X1	1.8078	64	9962.1	9988.5	350	415	410			
GR	1440.2	8901.3	1440.3	8910.7	1440.6	8932.2	1442.0	8973.0	1442.0	8983.0
GR	1442.1	8992.7	1442.0	9004.0	1441.7	9012.2	1441.7	9024.3	1441.0	9032.1
GR	1440.5	9145.4	1441.0	9157.5	1441.5	9192.7	1440.5	9220.8	1440.4	9232.0
GR	1440.7	9239.4	1439.9	9247.0	1439.7	9258.7	1439.9	9264.2	1440.2	9276.3
GR	1440.6	9288.0	1440.0	9321.9	1439.9	9331.3	1439.9	9335.7	1440.1	9343.4
GR	1442.0	9455.3	1442.0	9576.0	1442.2	9592.5	1441.2	9629.9	1441.2	9647.3
GR	1441.2	9653.2	1441.2	9660.7	1441.3	9678.6	1441.9	9706.7	1442.0	9726.0
GR	1441.6	9831.4	1441.4	9861.6	1441.6	9869.3	1441.5	9906.2	1441.7	9914.1
GR	1440.7	9940.6	1440.7	9952.4	1440.9	9962.1	1440.5	9968.4	1440.3	9974.6
GR	1440.4	9980.7	1440.7	9988.5	1440.6	9998.6	1440.3	10006.4	1440.6	10016.6
GR	1440.9	10025.9	1440.5	10035.8	1440.9	10056.9	1441.5	10066.3	1441.5	10078.7
GR	1441.2	10094.2	1440.5	10102.0	1440.6	10135.2	1440.8	10145.3	1441.9	10155.5
GR	1442.0	10165.8	1443.0	10196.0	1442.9	10206.2	1443.9	10215.6		

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ET		7.1	9.1				9478.7	10090.2	9972	10032.3
X1	1.8598	65	9997.5	10032.3	260	320	275			
GR	1446.0	8975.6	1445.9	8988.0	1445.8	8999.5	1445.6	9005.7	1445.8	9020.8
GR	1445.4	9072.4	1445.2	9081.9	1444.8	9091.6	1444.5	9103.0	1443.9	9118.1
GR	1443.9	9127.3	1443.9	9132.2	1444.0	9137.4	1444.1	9146.9	1444.6	9157.4
GR	1445.9	9169.8	1446.1	9179.9	1446.1	9190.6	1446.1	9201.1	1446.1	9213.5
GR	1446.9	9223.8	1446.5	9232.0	1446.1	9239.3	1445.9	9250.6	1445.0	9262.8
GR	1445.6	9371.3	1444.8	9379.8	1444.8	9383.3	1445.9	9390.1	1445.7	9402.5
GR	1446.4	9478.7	1446.3	9672.8	1446.3	9683.6	1445.8	9694.6	1445.7	9700.0
GR	1445.8	9752.4	1446.0	9764.4	1446.0	9773.5	1445.9	9792.9	1446.0	9802.5
GR	1446.0	9879.6	1445.7	9884.8	1445.6	9889.7	1445.6	9899.8	1445.4	9911.2
GR	1445.0	9921.4	1444.9	9929.3	1444.5	9939.8	1444.1	9948.0	1444.0	9954.5
GR	1444.1	9958.8	1444.6	9965.2	1444.8	9974.0	1445.0	9981.7	1444.6	9990.3
GR	1444.7	9997.5	1443.9	10000.0	1443.9	10000.1	1443.9	10008.8	1443.9	10018.1
GR	1443.9	10024.2	1444.3	10032.3	1445.0	10041.1	1446.0	10052.7	1446.2	10090.2
ET		7.1	9.1				9760.4	10235	9864.7	9965.6
X1	1.9167	58	9938.5	9964.8	230	320	310			
GR	1450.0	9444.0	1450.0	9457.7	1450.2	9469.1	1450.3	9477.2	1450.2	9487.2
GR	1450.1	9497.9	1450.0	9508.1	1449.3	9515.6	1449.5	9531.1	1449.7	9540.2
GR	1449.5	9544.7	1449.5	9551.5	1449.5	9560.0	1449.9	9571.8	1450.2	9584.6
GR	1450.9	9746.3	1450.4	9752.0	1450.9	9760.4	1450.8	9773.7	1450.7	9785.3
GR	1449.9	9862.3	1449.9	9885.6	1449.6	9899.5	1449.6	9917.0	1449.9	9922.9
GR	1449.7	9932.3	1449.9	9938.5	1448.9	9944.2	1448.9	9959.0	1449.5	9964.8
GR	1449.8	9971.7	1450.0	9978.5	1448.8	9983.9	1449.5	9988.1	1450.0	9992.9
GR	1449.3	10000.0	1449.3	10000.1	1449.4	10000.2	1449.7	10006.9	1450.5	10011.1
GR	1450.1	10046.5	1449.9	10054.2	1449.9	10060.0	1450.3	10065.6	1450.1	10071.6
GR	1449.9	10113.5	1448.8	10122.0	1448.9	10129.8	1449.7	10136.1	1449.8	10141.6
GR	1449.3	10147.3	1448.9	10154.6	1448.9	10159.9	1449.6	10163.6	1449.7	10172.2
GR	1449.8	10181.8	1450.3	10188.4	1452.4	10235				
ET		7.1	9.1				9973.5	10266.5	9985.3	10082.8
X1	1.9754	67	9985.3	10082.8	270	330	300			
GR	1454.1	9543.4	1454.4	9551.0	1454.6	9562.6	1454.8	9570.8	1454.5	9580.1

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GR   1454.4    9587.0    1454.7    9598.2    1454.6    9604.9    1454.0    9612.3    1454.1    9620.1
GR   1454.3    9671.2    1454.1    9679.6    1454.1    9689.9    1454.2    9700.5    1454.5    9710.0
GR   1455.5    9719.1    1455.9    9728.3    1456.1    9740.5    1456.2    9754.1    1456.2    9770.3
GR   1456.2    9796.1    1456.2    9811.5    1456.3    9826.0    1456.2    9839.6    1455.9    9854.7
GR   1455.9    9862.5    1455.9    9870.4    1455.9    9877.5    1455.7    9886.0    1455.5    9897.1
GR   1455.5    9909.6    1455.9    9915.1    1455.9    9923.1    1455.8    9935.6    1455.9    9964.9
GR   1456.1    9973.5    1454.9    9985.3    1454.1    9996.4    1454.1   10000.0    1454.1   10000.1
GR   1454.1   10005.9    1454.1   10022.3    1454.2   10031.7    1454.1   10045.3    1454.1   10059.8
GR   1454.1   10070.1    1454.1   10076.5    1454.5   10082.8    1454.6   10093.4    1454.9   10101.9
GR   1454.4   10114.6    1454.5   10121.6    1454.5   10128.7    1454.2   10136.2    1454.4   10144.4
GR   1454.3   10149.1    1454.1   10158.2    1455.0   10167.0    1455.3   10177.7    1456.0   10189.0
GR   1456.3   10201.0    1456.4   10212.2    1457.0   10223.1    1457.4   10232.8    1457.8   10242.1
GR   1458.0   10249.5    1458.5   10266.5
1
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ET                7.1       9.1                                   9922.6   10234.0    9955.8   10055.5
X1    2.027        51    9955.8    9986.8       220       230       270
GR   1458.3    9820.5    1458.7    9829.9    1458.6    9836.9    1458.8    9844.6    1458.8    9852.7
GR   1458.6    9862.4    1458.7    9868.6    1458.8    9876.6    1459.0    9888.5    1459.3    9898.0
GR   1460.0    9906.4    1460.1    9915.4    1460.1    9922.6    1459.9    9931.0    1459.9    9936.9
GR   1458.7    9946.1    1458.1    9955.8    1457.2    9960.1    1457.0    9973.5    1457.5    9979.7
GR   1458.0    9986.8    1458.3    9997.8    1458.3   10000.0    1458.3   10000.1    1458.3   10010.4
GR   1458.4   10012.9    1458.5   10018.3    1458.0   10025.5    1458.3   10031.2    1458.2   10037.3
GR   1458.3   10042.4    1458.4   10049.5    1458.3   10055.8    1458.5   10061.4    1458.1   10066.5
GR   1457.9   10072.4    1457.0   10080.2    1457.1   10086.8    1457.5   10094.1    1457.1   10098.6
GR   1456.2   10105.9    1456.1   10112.2    1457.9   10118.9    1459.6   10126.1    1460.1   10134.3
GR   1460.0   10144.3    1460.2   10152.8    1460.2   10162.2    1460.2   10170.3    1460.3   10180.4
GR   1462.0   10234.0

QT       2       982       982
ET                7.1       9.1                                   9942.2   10153.5   10020.6   10066.5
        DECREASE DISCHARGE FOR FLOW FROM CULVERT  STRUC. NOS. 50 AND 51.
X1   2.0720        66   10020.6   10066.5       220       200       230
GR   1462.2    9731.8    1462.1    9750.7    1462.1    9761.4    1461.8    9769.9    1461.2    9778.1
GR   1460.8    9785.3    1461.0    9795.8    1461.0    9808.9    1461.5    9820.2    1461.3    9829.1
GR   1461.0    9839.3    1460.9    9853.4    1461.2    9867.0    1461.3    9875.7    1461.0    9882.0
GR   1461.7    9890.1    1462.0    9900.3    1462.1    9911.3    1462.6    9922.7    1462.5    9933.0
GR   1462.8    9942.2    1462.3    9950.8    1462.0    9960.5    1461.4    9967.6    1461.8    9973.8
GR   1461.8   10012.4    1461.1   10020.6    1460.3   10025.9    1460.3   10031.9    1460.2   10037.4
GR   1460.5   10043.6    1460.2   10049.2    1460.6   10053.0    1460.8   10058.4    1461.9   10066.5
GR   1462.0   10076.6    1462.3   10085.2    1462.1   10093.0    1461.9   10101.1    1461.7   10109.5
GR   1462.0   10117.9    1462.1   10124.3    1462.2   10134.2    1462.5   10145.7    1463.2   10153.5
GR   1463.2   10161.2    1463.0   10171.9    1463.2   10182.5    1463.2   10192.8    1463.0   10204.4
GR   1462.8   10216.6    1462.6   10231.6    1462.2   10241.0    1461.5   10253.2    1460.6   10262.3
GR   1459.9   10271.9    1459.9   10277.5    1459.9   10288.4    1461.5   10297.2    1462.2   10306.6
GR   1463.0   10316.6    1463.6   10326.1    1464.5   10335.6    1464.9   10343.4    1465.1   10351.6
GR   1465.1   10351.7

ET                7.1       9.1                                   9975.5   10200.3    9996.5   10120.0
X1    2.112        49    9996.5   10010.1       210       205       215
GR   1466.5    9830.9    1466.3    9845.5    1466.4    9850.5    1466.4    9855.8    1466.3    9868.6
GR   1466.1    9880.3    1465.9    9890.5    1465.2    9904.0    1465.8    9912.6    1465.7    9925.6
GR   1465.8    9930.5    1465.9    9934.5    1465.9    9940.4    1465.9    9946.1    1466.0    9955.8
GR   1466.1    9965.0    1466.3    9975.5    1466.1    9982.1    1465.5    9989.2    1464.5    9996.5
GR   1463.9   10000.0    1463.9   10000.1    1463.9   10004.1    1464.6   10010.1    1465.0   10016.4
GR   1466.6   10021.8    1466.7   10028.3    1466.6   10034.5    1466.2   10043.2    1465.9   10052.1
GR   1465.9   10058.6    1465.7   10066.7    1465.6   10076.1    1465.2   10083.0    1464.4   10091.6
GR   1463.7   10097.3    1463.8   10104.3    1464.8   10114.4    1465.4   10121.7    1465.3   10128.1
GR   1465.1   10133.7    1464.9   10140.5    1465.0   10146.6    1465.7   10153.5    1466.8   10166.9
GR   1467.3   10175.9    1467.8   10184.4    1468.1   10193.1    1468.2   10200.3

QT       2       891       891
ET                7.1       9.1                                   9958     10042     10004    10034.4
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        DECREASE DISCHARGE FOR FLOW FROM STRUC. NO. 50.
        ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 3:1
        FLARE ANGLE DOWNSTREAM OF STRUC. #50.
X1   2.1572        28   10004.0   10034.4       250       225       240
GR   1470.7    9932.0    1470.5    9940.2    1470.7    9946.5    1470.6    9952.2    1471.0    9956.8
GR   1470.3    9965.7    1469.5    9974.8    1469.9    9978.2    1469.7    9982.9    1469.7    9986.2
GR   1469.0    9991.6    1469.4    9997.2    1468.8   10000.0    1468.8   10000.1    1468.4   10004.0
GR   1468.2   10011.3    1467.9   10017.2    1468.0   10024.3    1468.3   10034.4    1469.1   10046.1
GR   1470.1   10056.1    1470.4   10065.4    1470.9   10074.4    1470.7   10084.5    1470.8   10090.5
GR   1472.0   10113.5    1472.7   10127.5    1472.9   10134.3

NC    .035      .035      .035        .3        .5
        BEGIN SUN VALLEY PARKWAY CULVERTS (3- 10' X 3' RCBS.,  STRUC. NO. 50).
X1   2.172         4      9984     10016        80        80        80
X3      10
GR   1474.1    9984    1470.6    9984    1470.6   10016    1474.1   10016

NC    .012      .012      .012
QT       2      1107      1107
SC   3.012        .2       2.9         0         3        10       169      12.3    1471.3    1470.6
        END CULVERTS. NO WEIR FLOW OVER ROAD EXPECTED.
        INCREASE DISCHARGE AT THIS SECTION OF WHICH 891 CFS FLOWS THROUGH
        STRUCT. #50 AND 217 CFS FLOWS ON TO STRUCS. NO. 51 AND 52
X1   2.204         4      9984     10016       169       169       169
X2                            2    1474.3    1474.0
X3      10
BT      11      9900    1478.6               10000    1477.6              10009.9   1477.65
BT   10010   1477.13              10050.1   1476.33              10058.1   1475.93              10068.1
BT   1475.0             10073.1    1475.0              10083.1    1477.5              10093.1      1478
BT           10135.1    1479.0
GR   1477.5    9984    1471.3    9984    1471.3   10016    1477.5   10016

NC    .035      .035      .035
ET               7.1       9.1                                    9980     10042      9980     10042
        ET CARD USED TO LIMIT EFFECTIVE FLOW TO WITHIN 1:1 FLARE ANGLE UPSTREAM
        OF CULVERT.
X1   2.216        11      9915     10023        35        38        38
GR    1478      9840      1477      9855      1476      9875      1475      9915      1474      9962
GR    1473      9970      1472      9988      1472     10015      1473     10023      1477     10046
GR    1478     10060

NC    .049      .049      .042        .1        .3
QT       2       982       982
ET               7.1       9.1                                   9975.5    10200.3    9996.5   10120.0
        REPEAT SECTION TO BEGIN TRIB. ANALYSIS FOR TRIBUTARY "A" TO STRUC.#51.
        ADD 10 TO ALL SECTION NOS. TO IDENTFY TRIB."A"
X1  -2.112        49    9996.5   10010.1       210       205       215
GR   1466.5    9830.9    1466.3    9845.5    1466.4    9850.5    1466.4    9855.8    1466.3    9868.6
GR   1466.1    9880.3    1465.9    9890.5    1465.2    9904.0    1465.8    9912.6    1465.7    9925.6
GR   1465.8    9930.5    1465.9    9934.5    1465.9    9940.4    1465.9    9946.1    1466.0    9955.8
GR   1466.1    9965.0    1466.3    9975.5    1466.1    9982.1    1465.5    9989.2    1464.5    9996.5
GR   1463.9   10000.0    1463.9   10000.1    1463.9   10004.1    1464.6   10010.1    1465.0   10016.4
GR   1466.6   10021.8    1466.7   10028.3    1466.6   10034.8    1466.2   10043.2    1465.9   10052.1
GR   1465.9   10058.6    1465.7   10066.7    1465.6   10076.1    1465.2   10083.0    1464.4   10091.6
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GR   1463.7   10097.3    1463.8   10104.3    1464.8   10114.4    1465.4   10121.7    1465.3   10128.1
GR   1465.1   10133.7    1464.9   10140.5    1465.0   10146.6    1465.7   10153.5    1466.8   10166.9
GR   1467.3   10175.9    1467.8   10184.4    1468.1   10193.1    1468.2   10200.3
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NC     .049      .049      .042       .3        .5
QT        2        91        91
        DECREASE DISCHARGE TO 91 CFS FOR FLOW THROUGH STRUC. #51.
        BEGIN SUN VALLEY PARKWAY CULVERTS (2-42" X 29" CSPAS. STRUC. NO.51).
X1    12.152         4    9996.5   10003.5       215       180       215
X3        10
GR    1472.4    9996.5    1467.6    9996.5    1467.6   10003.5    1472.4   10003.5

NC     .024      .024      .024
QT        2       217       217
SB     1.25      5.84       2.9         0       7.0       1.7      12.8         0    1470.8    1467.6
        END CULVERTS. NO WEIR FLOW OVER ROAD EXPECTED.
        INCREASE DISCHARGE AT THIS SEC.TO 217 CFS OF WHICH 91 CFS FLOWS TO
        STRUC. 51, 128CFS FLOWS TO STRUC. 52.
X1    12.181         0         0         0       155       155       155       3.2
X2                           1   1473.22    1473.7
X3        10
BT        10     10000   1475.83            10058.9   1475.31             10059   1474.81
BT     10098    1474.0             10106    1473.7             10116    1473.7            10121
BT    1473.8             10153    1474.0             10163    1475.0            10182    1473.5
BT         0

NC     .016      .049      .035        .
ET                           9.1                                                   9970.5     10076
X1    12.189        10      9991     10006        40        40        40
GR    1476.7      9943    1476.1      9943    1475.26      9983    1474.86      9991    1474.1      9997
GR    1474.1     10002    1474.9     10006    1474.8     10040      1475     10065    1476.0     10085

NC     0.016      .049      .035        .1        .3
ET                           9.1                                                   9949.4    10009.7
X1    12.197         8      9993     10010        43        43        43
GR    1477.0      9945    1476.5      9945    1475.68      9985    1475.28      9993    1474.39      9997
GR    1474.4     10002    1476.5     10010      1477     10050

ET                           9.1                                                   9947.3    10008.5
        UPSTREAM END TRIB."A"  ANALYSIS
X1    12.209         8      9988     10010        65        65        65
GR    1477.6      9940   1477.13      9940   1476.33      9980   1475.93      9988      1475      9998
GR      1475     10003    1477.5     10013      1478     10023

NC     .049      .049      .042        .1        .3
QT        2      1096      1096
ET                 7.1       9.1                                   9922.6    10234.0    9955.8    10055.5
        REPEAT SEC. FOR START OF TRIB. "B" ANALYSIS. ADD 20 TO ALL SEC. NOS.
        TO IDENTIFY TRIB. "B".
X1    -2.027        51      9955.8     9986.8       220       230       270
GR    1458.3    9820.5    1458.7     9829.9    1458.6     9836.9    1458.8     9844.6    1458.8     9852.7
GR    1458.6    9862.4    1458.7     9868.6    1458.8     9876.6    1459.0     9888.5    1459.3     9898.0
GR    1460.0    9906.4    1460.1     9915.4    1460.1     9922.6    1459.9     9931.0    1459.9     9936.9
GR    1458.7    9946.1    1458.1     9955.8    1457.2     9960.1    1457.0     9973.5    1457.5     9979.7
1
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GR    1458.0    9986.8    1458.3     9997.8    1458.3    10000.0    1458.3    10000.1    1458.3    10010.4
GR    1458.4   10012.9    1458.5    10018.3    1458.0    10025.3    1458.3    10031.2    1458.2    10037.3
GR    1458.3   10042.4    1458.4    10049.5    1458.3    10055.8    1458.5    10061.4    1458.1    10066.5
GR    1457.9   10072.4    1457.0    10080.2    1457.1    10086.8    1457.5    10094.1    1457.1    10098.6
GR    1456.2   10105.9    1456.1    10112.2    1457.9    10118.9    1459.6    10126.1    1460.1    10134.3
GR    1460.0   10144.3    1460.2    10152.8    1460.2    10162.2    1460.2    10170.3    1460.3    10180.4
GR    1462.0   10234.0

QT        2       117       117
ET                 7.1       9.1                                  10153.5    10351.7   10252.5    10297.7
        DECREASE DISCHARGE TO 117 CFS FLOW THROUGH STRUC. 52.
X1    22.080        66    10262.3    10297.2       200       200       200
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GR   1462.2     9731.8     1462.1     9750.7     1462.1     9761.4     1461.8     9769.9     1461.2     9778.1
GR   1460.8     9785.3     1461.0     9795.8     1461.0     9808.9     1461.5     9820.2     1461.3     9829.1
GR   1461.0     9839.3     1460.9     9853.4     1461.2     9867.0     1461.3     9875.7     1461.0     9882.0
GR   1461.7     9890.1     1462.0     9900.3     1462.1     9911.3     1462.6     9922.7     1462.5     9933.0
GR   1462.6     9942.2     1462.3     9950.8     1462.0     9960.5     1461.4     9967.6     1461.8     9973.8
GR   1461.8    10012.4     1461.1    10020.6     1460.3    10025.9     1460.3    10031.9     1460.2    10037.4
GR   1460.5    10043.6     1460.2    10049.2     1460.6    10053.0     1460.8    10058.4     1461.9    10066.5
GR   1462.0    10076.6     1462.3    10085.2     1462.1    10093.0     1461.9    10101.1     1461.7    10109.5
GR   1462.0    10117.9     1462.1    10124.3     1462.2    10134.2     1462.5    10145.7     1463.2    10153.5
GR   1463.2    10161.2     1463.0    10171.9     1463.2    10182.5     1463.2    10192.8     1463.0    10204.4
GR   1462.8    10216.6     1462.6    10231.6     1462.2    10241.0     1461.5    10253.2     1460.6    10262.3
GR   1459.9    10271.9     1459.9    10277.5     1459.9    10288.4     1461.5    10297.2     1462.2    10306.6
GR   1463.0    10316.6     1463.6    10326.1     1464.5    10335.6     1464.9    10343.4     1465.1    10351.6
GR   1465.1    10351.7

NC     .049       .049       .042         .3         .5
       BEGIN SUN VALLEY PARKWAY CULVERTS (2-49" X 33" CSPAS. STRUC. NO 52)
X1   22.097          4    9995.75   10004.25         90         90         90
X3       10
GR   1465.7    9995.75     1461.9    9995.75     1461.9   10004.25     1465.7   10004.25

NC     .024       .024       .024
SB     1.25       5.36        2.9          0        8.5       2.17       17.4          0       1465     1461.9
       END CULVERTS.  NO WEIR FLOW OVER ROAD EXPECTED.
X1   22.129          0          0          0        169        169        169                  3.1
X2                              1    1467.75     1468.8
X3       10
BT        9      10000    1472.09                10077.9     1471.4                 10078     1470.8
BT    10118     1470.0                 10126     1469.6                 10130     1468.8                 10135
BT   1468.8                 10147     1471.7                 10163       1472

BT        2        128        128
NC     .016       .049       .035
ET                          9.1                                                    9977.6    10009.3
       INCREASE DISCHARGE TO 128CFS WHICH SPLITS ALONG RD. FROM STRUC.51.
       THIS FLOW IS ATTENUATED FROM 128CFS TO 117CFS AS IT IS ROUTED THROUGH
       STRUC. 52.
X1   22.140          8       9991      10010         55         55         55
GR   1473.0       9943     1472.5       9943    1471.71       9983    1471.31       9991     1470.0       9997
GR   1470.0      10002       1472      10010       1473      10040
1
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ET                          9.1                                                    9960.4    10043.7
X1   22.182          8       9992      10002        227        227        227
GR   1475.3       9944     1474.8       9944    1474.0       9984    1473.7       9992     1473.7      10002
GR   1473.8      10007     1474.0      10039    1475.0      10049
1
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        DLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


#PROF 1

CCHV=     .100 CEHV=     .300
#SECNO  .114

3265 DIVIDED FLOW
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FLOODWAY ANALYSIS USING FIXED ENCROACHMENT OPTION (METHOD 1) AND
BASED ON PREVIOUS ANALYSIS BY EQUAL CONVEYANCE REDUCTION (METHOD 4).
STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM
ALONG BASELINE FROM CONFLUENCE WITH MCMICKEN DAM 100-YR FLOOD POOL EL.
CROSS -SECTINS ARE CODED FOR LEFT TO RIGHT LOOKING DOWNSTREAM WITH
STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
A CONTINUOUS DOMAINATE LOW FLOW CHANNEL WAS NOT EVIDENT BETWEEN
SEC. 0.1136 AND 1.6013. THEREFORE CHANNEL BANK STATIONS WERE CHOSEN
ALONG ONE SMALL CHANNEL ALIGNMENT WHICH PROVIDED THE MOST DIRECT
COURSE TO THE MCMICKEN DAM FLOODPOOL.

.114	1.61	1355.81	.00	1355.80	1355.86	.05	.00	.00	1355.50
1447.0	736.9	131.9	578.2	407.1	46.5	450.5	.0	.0	1355.40
.00	1.81	2.83	1.28	.049	.045	.049	.000	1354.20	5858.38
.006897	0.	0.	0.	0	0	5	.00	2495.92	10023.35

*SECNO .265

3265 DIVIDED FLOW

.265	1.10	1363.10	.00	.00	1363.14	.04	7.28	.00	1362.80
1447.0	750.5	112.0	584.4	479.8	56.4	352.7	21.3	51.5	1362.70
.18	1.56	1.99	1.66	.049	.045	.049	.000	1362.00	5517.51
.006977	1240.	1070.	800.	5	0	0	.00	1940.97	9995.02

*SECNO .362

3265 DIVIDED FLOW

.362	1.05	1368.05	.00	.00	1368.11	.06	4.97	.00	1367.70
1447.0	475.9	141.8	829.3	325.9	44.7	455.4	32.1	84.3	1367.50
.26	1.46	3.18	1.82	.049	.045	.049	.000	1367.00	4916.03
.012597	625.	480.	480.	5	0	0	.00	3183.27	10017.91

1

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

*SECNO .474

3265 DIVIDED FLOW

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

.474	1.08	1371.88	.00	.00	1371.91	.03	3.80	.00	1372.00
1447.0	717.2	66.8	662.9	591.1	35.3	464.7	42.5	117.2	1372.00
.36	1.21	1.89	1.43	.049	.045	.049	.000	1370.80	5315.30
.005507	425.	420.	525.	6	0	0	.00	2924.54	9986.02

*SECNO .623

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.823	1.85	1375.85	1375.85	.00	1375.98	.13	3.45	.03	1375.50
1447.0	805.7	315.1	326.2	418.4	61.7	211.0	50.8	143.3	1375.50
.40	1.93	5.11	1.55	.049	.045	.049	.000	1374.00	5857.59
.014788	390.	410.	430.	4	14	0	.00	2688.35	10005.93

*SECNO .773

3265 DIVIDED FLOW

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

.773	2.79	1381.39	.00	.00	1381.52	.13	5.54	.00	1380.80
1447.0	691.0	360.7	395.4	343.5	85.0	152.2	59.5	168.9	1380.00
.46	2.01	4.24	2.60	.049	.045	.049	.000	1378.60	6256.79
.006307	600.	600.	600.	6	0	0	.00	1021.35	10235.47

*SECNO .893

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY

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

3720 CRITICAL DEPTH ASSUMED

.893	2.22	1385.22	1385.22	.00	1385.37	.15	3.42	.01	1385.70
1447.0	1049.1	271.7	126.2	478.3	50.6	38.5	64.5	180.3	1385.50
.50	2.19	5.37	3.28	.049	.045	.049	.000	1383.00	6711.17
.014261	370.	370.	400.	9	13	0	.00	1655.73	10725.09

*SECNO 1.016

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.016	2.36	1390.06	1390.06	.00	1390.20	.14	4.54	.00	1388.50
1447.0	1020.4	368.6	58.0	657.2	69.9	49.9	70.5	200.7	1389.80
.55	1.55	5.27	1.16	.049	.045	.049	.000	1387.70	7160.15
.009265	380.	450.	450.	6	9	0	.00	2949.74	11066.40

*SECNO 1.094

3265 DIVIDED FLOW

1.094	1.98	1394.18	.00	.00	1394.23	.05	4.02	.01	1394.00
1447.0	1381.6	59.9	5.5	755.7	29.7	9.2	78.1	226.1	1394.10
.61	1.83	2.02	.60	.049	.045	.049	.000	1392.20	7452.07
.009604	425.	450.	330.	6	0	0	.00	2326.93	10909.27

*SECNO 1.177

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3720 CRITICAL DEPTH ASSUMED

1.177	1.03	1399.73	1399.73	.00	1399.97	.24	8.09	.06	1399.50
1447.0	1269.7	174.3	3.0	332.0	38.0	2.6	84.5	243.5	1400.00
.64	3.82	4.58	1.14	.049	.045	.049	.000	1398.70	7944.92
.037479	480.	450.	520.	20	11	0	.00	817.51	10685.24

*SECNO 1.285

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

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.51

1.285	1.18	1406.58	.00	.00	1406.62	.04	6.64	.02	1406.10
1447.0	1293.7	108.9	44.4	794.0	45.7	52.5	92.5	261.3	1406.10
.74	1.63	2.38	.85	.049	.045	.049	.000	1405.40	8255.45
.005946	540.	590.	590.	11	0	0	.00	2021.84	10572.71

*SECNO 1.375

3265 DIVIDED FLOW

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

1.375	.76	1412.45	.00	.00	1412.58	.13	5.93	.03	1412.20
1447.0	1120.4	175.0	151.6	405.4	42.3	81.5	101.0	282.6	1412.10
.79	2.76	4.14	1.86	.049	.045	.049	.000	1411.70	8494.00
.028676	520.	620.	500.	6	0	0	.00	1540.93	10468.32

*SECNO 1.495

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.90

3470 ENCROACHMENT STATIONS= 8981.4 10284.1 TYPE= 1 TARGET= 1302.699
DECREASE DISCHARGE.
ET CARDS APPLIED AT SECS. 1.4953 TO 2.112 TO BLOCK INEFFECTIVE FLOW
SEPARATED BY RIDGE ON LEFT SIDE (LOOKING DOWNSTREAM).

1.495	2.27	1420.27	.00	.00	1420.35	.08	7.76	.00	1418.50
1271.0	1036.5	224.6	9.8	583.0	58.3	9.6	109.7	303.1	1419.70
.87	1.78	3.85	1.02	.049	.045	.049	.000	1418.00	8988.52
.006110	640.	690.	625.	6	0	0	.00	1258.39	10282.11

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

*SECNO 1.601
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9436.1 10180.4 TYPE= 1 TARGET= 744.301
DECREASE DISCHARGE.

1.601	2.54	1426.44	1426.44	.00	1426.68	.24	5.55	.05	1425.70
1096.0	587.4	444.8	63.7	221.8	83.7	31.0	116.3	315.8	1425.90
.91	2.65	5.32	2.05	.049	.042	.049	.000	1423.90	9448.30
.018447	580.	600.	600.	5	12	0	.00	640.27	10088.57

*SECNO 1.668

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9369.3 10040.0 TYPE= 1 TARGET= 670.700

1.668	1.96	1432.56	.00	.00	1432.69	.14	6.00	.01	1432.00
1096.0	788.3	278.6	29.0	321.9	67.8	15.2	120.2	322.6	1431.90
.96	2.45	4.11	1.91	.049	.042	.049	.000	1430.60	9380.25
.010309	450.	390.	340.	7	0	0	.00	651.42	10032.93

*SECNO 1.730

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9532.6 10142.1 TYPE= 1 TARGET= 609.500

1.730	1.95	1436.15	1436.15	.00	1436.42	.27	3.31	.04	1435.60
1096.0	938.1	71.7	86.3	216.7	17.3	39.7	122.0	325.8	1435.80
.97	4.33	4.13	2.17	.049	.042	.049	.000	1434.20	9538.18
.022233	200.	320.	350.	8	5	0	.00	554.11	10093.35

*SECNO 1.808

3265 DIVIDED FLOW

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

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

3470 ENCROACHMENT STATIONS= 9592.5 10215.6 TYPE= 1 TARGET= 623.100

1.808	2.21	1441.91	.00	.00	1442.09	.18	5.66	.01	1440.90
1096.0	303.9	170.1	622.1	138.0	37.0	178.2	124.7	330.3	1440.70

```
     1.01      2.20      4.60      3.49      .049      .042      .049      .000   1439.70   9603.54
   .010799     330.      410.      415.         6         0         0       .00    508.98  10155.99


*SECNO 1.860
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9478.7   10090.2  TYPE=      1  TARGET=      611.500
     1.860      2.11   1446.01   1446.01       .00   1446.42       .41      3.39       .07   1444.70
    1096.0     566.9     464.3      64.8     149.4      70.9      18.0     126.6     333.1   1444.30
      1.02      3.80      6.55      3.61      .049      .042      .049      .000   1443.90   9689.92
   .013326      260.      275.      320.         3         8         0       .00    365.21  10055.13


*SECNO 1.917

3470 ENCROACHMENT STATIONS=     9760.4   10235.0  TYPE=      1  TARGET=      474.600
     1.917      1.73   1450.53       .00       .00   1450.81       .28      4.37       .01   1449.90
    1096.0     230.9     231.3     633.8      76.2      38.2     165.3     128.3     335.4   1449.50
      1.04      3.03      6.06      3.84      .049      .042      .049      .000   1448.80   9802.13
   .017993      230.      310.      320.         4         0         0       .00    391.27  10193.40


*SECNO 1.975

3470 ENCROACHMENT STATIONS=     9973.5   10266.5  TYPE=      1  TARGET=      293.000
     1.975      1.55   1455.55       .00       .00   1455.93       .37      5.09       .03   1454.90
    1096.0       3.7     726.6     365.7       2.1     135.0      95.3     130.1     337.5   1454.50
      1.06      1.76      5.38      3.84      .049      .042      .049      .000   1454.00   9978.86
   .014997      270.      300.      330.         4         0         0       .00    202.96  10181.82


*SECNO 2.027

3470 ENCROACHMENT STATIONS=     9922.6   10234.0  TYPE=      1  TARGET=      311.400
1
   06MAY93      11:52:33                                                                          PAGE   20


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


     2.027      2.96   1459.06       .00       .00   1459.45       .38      3.52       .00   1458.10
    1096.0      17.5     307.4     771.1       6.9      52.8     167.2     131.4     338.6   1458.00
      1.07      2.54      5.82      4.61      .049      .042      .049      .000   1456.10   9943.34
   .013348      220.      270.      230.         4         0         0       .00    190.47  10123.81


*SECNO 2.072
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9942.2   10153.5  TYPE=      1  TARGET=      211.300
        DECREASE DISCHARGE FOR FLOW FROM CULVERT  STRUC. NOS. 50 AND 51.
     2.072      2.83   1462.73   1462.73       .00   1463.19       .46      2.74       .02   1461.10
     982.0     218.1     626.8     137.1      67.7      97.9      52.6     132.5     339.5   1461.90
      1.08      3.22      6.40      2.60      .049      .042      .049      .000   1459.90   9943.45
   .011975      220.      230.      200.         3        10         0       .00    204.78  10148.23


*SECNO 2.112
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3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9975.5 10200.3 TYPE= 1 TARGET= 224.800

2.112	2.51	1466.21	1466.21	.00	1466.77	.56	3.18	.03	1464.50
982.0	49.6	228.4	704.0	12.0	28.3	132.7	133.4	340.4	1464.60
1.09	4.15	8.08	5.31	.049	.042	.049	.000	1463.70	9978.45
.019819	210.	215.	205.	5	15	0	.00	158.79	10159.72

*SECNO 2.157
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9958.0 10042.0 TYPE= 1 TARGET= 84.000
DECREASE DISCHARGE FOR FLOW FROM STRUC. NO. 50.
ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 3:1
FLARE ANGLE DOWNSTREAM OF STRUC. #50.

2.157	2.68	1470.58	1470.58	.00	1471.43	.84	4.25	.08	1468.40
891.0	188.5	619.4	83.1	42.7	74.9	15.4	134.2	341.0	1468.30
1.10	4.41	8.27	5.40	.049	.042	.049	.000	1467.90	9962.90
.016405	250.	240.	225.	3	8	0	.00	79.10	10042.00

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

CCHV= .300 CEHV= .500
*SECNO 2.172

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1474.10 ELREA= 1474.10

BEGIN SUN VALLEY PARKWAY CULVERTS (3- 10' X 3' RCBS., STRUC. NO. 50).

2.172	2.88	1473.48	1473.48	.00	1474.93	1.45	1.29	.30	1474.10
891.0	.0	891.0	.0	.0	92.1	.0	134.4	341.1	1474.10
1.10	.00	9.67	.00	.000	.035	.000	.000	1470.60	9984.00
.015814	80.	80.	80.	20	8	0	.00	32.00	10016.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	CDFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.012	.20	2.90	.00	3.00	10.00	169.00	12	3	1471.30	1470.60

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

5140, NORMAL DEPTH EXCEEDS CULVERT HEIGHT
*SECNO 2.204

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 7.38

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	SLTRD	WEIRLN
1479.26	1477.12	2.31	217.	895.	6.563	90.0	1475.00	72.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1477.50 ELREA= 1477.50

END CULVERTS. NO WEIR FLOW OVER ROAD EXPECTED.
INCREASE DISCHARGE AT THIS SECTION OF WHICH 891 CFS FLOWS THROUGH
STRUCT. #50 AND 217 CFS FLOWS ON TO STRUCS. NO. 51 AND 52

2.204	5.27	1476.57	.00	.00	1477.24	.67	2.31	.00	1477.50
1107.0	.0	1107.0	.0	.0	168.7	.0	135.0	341.2	1477.50
1.11	.00	6.56	.00	.000	.012	.000	.000	1471.30	9984.00
.000448	169.	169.	169.	3	0	0	.00	32.00	10016.00

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

#SECNO 2.216

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

3470 ENCROACHMENT STATIONS= 9980.0 10042.0 TYPE= 1 TARGET= 62.000
ET CARD USED TO LIMIT EFFECTIVE FLOW TO WITHIN 1:1 FLARE ANGLE UPSTREAM
OF CULVERT.

2.216	5.08	1477.08	.00	.00	1477.38	.30	.03	.11	100000.00
1107.0	.0	971.5	135.5	.0	212.6	46.1	135.1	341.3	1473.00
1.11	.00	4.57	2.94	.000	.035	.035	.000	1472.00	9980.00
.001578	35.	38.	38.	2	0	0	.00	62.00	10042.00

CCHV= .100 CEHV= .300
#SECNO -2.112
START TRIB COMP

-2.112	2.112	1466.211

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY

3470 ENCROACHMENT STATIONS= 9975.5 10200.3 TYPE= 1 TARGET= 224.800
REPEAT SECTION TO BEGIN TRIB. ANALYSIS FOR TRIBUTARY "A" TO STRUC.#51.
ADD 10 TO ALL SECTION NOS. TO IDENTFY TRIB."A"

-2.112	2.51	1466.21	1466.21	.00	1466.77	.56	.76	-.76	1464.50
982.0	49.6	228.4	704.0	12.0	28.3	132.7	136.2	341.8	1464.60
1.12	4.15	8.08	5.31	.049	.042	.049	.000	1463.70	9978.45
.019819	210.	215.	205.	0	8	0	.00	158.79	10159.72

CCHV= .300 CEHV= .500

```
#SECNO 12.152

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .12


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1472.40 ELREA=      1472.40

        DECREASE DISCHARGE TO 91 CFS FOR FLOW THROUGH STRUC. #51.
        BEGIN SUN VALLEY PARKWAY CULVERTS (2-42" X 29" CSPAS. STRUC. NO.51).
    12.152      2.63   1470.25       .00       .00   1470.63       .37      3.80       .06   1472.40
      91.0        .0      91.0        .0        .0      18.5        .0     136.6     342.2   1472.40
      1.14       .00      4.71       .00      .000      .042      .000      .000   1467.60   9996.50
   .011169      215.      215.      180.         1         0         0       .00      7.00  10003.50


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


SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1469.71 , NOT    1470.25 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR       CDFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     1.25       5.84       2.90        .00       7.00       1.70      12.80        .00   1470.80   1467.60

#SECNO 12.181
PRESSURE AND WEIR FLOW,  Weir Submergence Based on TRAPEZOIDAL Shape


 ESPRS      EGLWC      H3         QWEIR      QPR        BAREA      TRAPEZOID      ELLC       ELTRD      WEIRLN
                                                                     AREA
   1496.31   1476.75       .00      129.       89.       13.        13.       1473.22   1473.70       91.


3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1475.60 ELREA=      1475.60

        END CULVERTS. NO WEIR FLOW OVER ROAD EXPECTED.
        INCREASE DISCHARGE AT THIS SEC.TO 217 CFS OF WHICH 91 CFS FLOWS TO
        STRUC. 51, 128CFS FLOWS TO STRUC. 52.
    12.181      3.18   1473.98       .00       .00   1475.46      1.47       .00       .00   1475.60
     217.0        .0     217.0        .0        .0      22.3        .0     136.7     342.2   1475.60
      1.14       .00      9.74       .00      .000      .024      .000      .000   1470.80   9996.50
   .012534      155.      155.      155.        20         0         8       .00      7.00  10003.50


#SECNO 12.189

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.50

    12.189      1.87   1475.97   1475.50       .00   1476.04       .07       .16       .42   1474.86
     217.0      53.1      62.7     101.3      19.2      24.1      74.0     136.7     342.2   1474.90
      1.15      2.77      2.60      1.37      .016      .035      .049      .000   1474.10   9949.32
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   .002008      40.      40.      40.       15       16        0      .00   133.03  10084.35


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


CCHV=     .100 CEHV=     .300
*SECNO 12.197
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    12.197      2.01   1476.40   1476.40       .00   1476.79       .38       .15       .09   1475.28
     217.0     107.3     109.7        .0      20.2      24.0        .0     136.8     342.3   1476.50
      1.15      5.32      4.58       .00      .016      .035      .000      .000   1474.39   9949.70
   .007343       43.       43.       43.        20         8         0       .00     59.93  10009.63


*SECNO 12.209
        UPSTREAM END TRIB."A"  ANALYSIS
    12.209      1.90   1476.90   1476.90       .00   1477.29       .39       .51       .00   1475.93
     217.0      73.1     125.0      18.8      14.2      23.8       7.2     136.9     342.4   1475.00
      1.15      5.13      5.25      2.61      .016      .035      .049      .000   1475.00   9951.55
   .008265       65.       65.       65.         2        11         0       .00     59.05  10010.60


CCHV=     .100 CEHV=     .300
*SECNO -2.027
START TRIB COMP
    -2.027      2.027  1459.064

3470 ENCROACHMENT STATIONS=     9922.6   10234.0  TYPE=      1  TARGET=      311.400
        REPEAT SEC. FOR START OF TRIB. "B" ANALYSIS. ADD 20 TO ALL SEC. NOS.
        TO IDENTIFY TRIB. "B".
    -2.027      2.96   1459.06       .00       .00   1459.44       .38       .00       .00   1458.10
    1096.0      17.6     307.2     771.2       6.9      53.0     167.8     137.6     343.1   1458.00
      1.17      2.54      5.80      4.60      .049      .042      .049      .000   1456.10   9943.31
   .013221       220.      270.      230.         0         0         0       .00    180.52  10123.83


*SECNO 22.080

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .22


3470 ENCROACHMENT STATIONS=    10153.5   10351.7  TYPE=      1  TARGET=      198.200
        DECREASE DISCHARGE TO 117 CFS FLOW THROUGH STRUC. 52.
    22.080      1.65   1461.55       .00       .00   1461.64       .08      2.16       .03   1460.60
     117.0       4.8     112.2        .0       4.6      47.3        .0     138.3     343.6   1461.50
      1.19      1.04      2.37       .02      .049      .042      .049      .000   1459.90  10252.29
   .003024       200.      200.      200.         2         0         0       .00     45.61  10297.90


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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         OLOB      OCH       OROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
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   SLOPE     XLOBL     XLCH     XLOBR     ITRIAL    IDC       ICOMP     COPAR     TOPWID    ENDST


CCHV=     .300 CEHV=     .500
*SECNO 22.097

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1465.70 ELREA=      1465.70

        BEGIN SUN VALLEY PARKWAY CULVERTS (2-49" X 33" CSPAS. STRUC. NO 52)
   22.097      1.80   1463.70   1463.70      .00   1464.61      .91      .65      .41   1465.70
    117.0       .0     117.0       .0       .0      15.3       .0    138.3    343.7   1465.70
     1.19      .00      7.65      .00     .000      .042     .000     .000   1461.90   9995.75
  .034147      90.       90.       90.       20         8        0      .00     8.50  10004.25



SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1463.11 , NOT    1463.70 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCRD
    1.25      5.36      2.90       .00      8.50      2.17      17.40      .00   1465.00   1461.90

*SECNO 22.129

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.15

CLASS B LOW FLOW

3420 BRIDGE W.S.=    1465.65 BRIDGE VELOCITY=       8.41     CALCULATED CHANNEL AREA=        4.

 ESPRS     ESLWC      HS       QWEIR     QLOW      BAREA   TRAPEZOID     ELLC      ELTRD     WEIRLN
                                                              AREA
  1467.46   1468.57      .00        0.      117.       17.       17.    1467.75   1468.80        0.



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1468.80 ELREA=      1468.80

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        END CULVERTS.  NO WEIR FLOW OVER ROAD EXPECTED.
   22.129      3.30   1468.30      .00       .00   1468.57      .27     3.97      .00   1468.80
    117.0       .0     117.0       .0       .0      28.1       .0    138.4    343.7   1468.80
     1.20      .00      4.16      .00     .000      .024     .000     .000   1465.00   9995.75
  .001979     169.      169.      169.        0         0        0      .00     8.50  10004.25


*SECNO 22.140
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
        INCREASE DISCHARGE TO 128CFS WHICH SPLITS ALONG RD. FROM STRUC.51.
        THIS FLOW IS ATTENUATED FROM 128CFS TO 117CFS AS IT IS ROUTED THROUGH
        STRUC. 52.
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   22.140      1.82   1471.82   1471.82      .00   1472.22      .40      .22      .05   1471.31
    128.0      11.4     116.6       .0      2.7      22.6       .0    138.5    343.7   1472.00
     1.21      4.17      5.15      .00     .016      .035     .000     .000  1470.00   9977.61
  .011331       55.       55.       55.       20        11        0      .00    31.66  10009.27


*SECNO 22.182
   22.182       .77   1474.47   1474.46      .00   1474.70      .23     2.43      .05   1473.70
    128.0      52.6      27.5      47.9     10.4       7.7     22.8    138.6    344.0   1473.70
     1.22      5.08      3.58      2.10     .016      .035     .049     .000  1473.70   9960.70
  .010162      227.      227.      227.        6        18        0      .00    82.96  10043.66


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T1      SUN VALLEY PARKWAY NORTH FIS.  CONTRACT NO. 90-04
T2      100-YEAR WATER SURFACE PROFILE                    A-N WEST INC. PHX. AZ.
T3      WASH NO.8, 100-YEAR FLOODWAY

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

    -10        3                           0                                   1356.81

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

    15                  -1

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


*PROF 2
0

CCHV=     .100 CEHV=     .300
*SECNO  .114
3280 CROSS SECTION       .11 EXTENDED       .01 FEET


3470 ENCROACHMENT STATIONS=     7289.1    7621.3  TYPE=      1  TARGET=      332.160
        FLOODWAY ANALYSIS USING FIXED ENCROACHMENT OPTION (METHOD 1) AND
        BASED ON PREVIOUS ANALYSIS BY EQUAL CONVEYANCE REDUCTION (METHOD 4).
        STARTING WATER SURFACE ELEVATION BASED ON SLOPE AREA METHOD.
        CROSS-SECTION I.D. NUMBERS ARE IN RIVER MILES INCREASING UPSTREAM
        ALONG BASELINE FROM CONFLUENCE WITH MOMICKEN DAM 100-YR FLOOD POOL EL.
        CROSS -SECTINS ARE CODED FOR LEFT TO RIGHT LOOKING DOWNSTREAM WITH
        STATION 10000 AT BASELINE UNLESS OTHERWISE NOTED.
        A CONTINUOUS DOMAINATE LOW FLOW CHANNEL WAS NOT EVIDENT BETWEEN
        SEC. 0.1136 AND 1.6013. THEREFORE CHANNEL BANK STATIONS WERE CHOSEN
        ALONG ONE SMALL CHANNEL ALIGNMENT WHICH PROVIDED THE MOST DIRECT
        COURSE TO THE MOMICKEN DAM FLOODPOOL.
     .114      2.61   1356.81       .00   1355.81   1356.99       .18       .00       .00   1355.50
   1447.0        .0     396.4    1050.6        .0      90.6     358.2        .0        .0   1355.40
     .00       .00      4.38      2.93      .000      .045      .049      .000   1354.20   7289.10
  .007029        0.        0.        0.         0         0         0       .00    332.16   7621.26


*SECNO  .265
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3470 ENCROACHMENT STATIONS=     7142.8    7463.8  TYPE=      1  TARGET=      321.000
      .265      2.09   1364.09       .00   1363.10   1364.26       .17      7.27       .00   1362.80
    1447.0     892.2     554.8        .0     294.7     146.9        .0      10.4       7.6 100000.00
      .09      3.03      3.78       .00      .049      .045      .000      .000   1362.00   7142.80
   .007166     1240.     1070.      800.         2         0         0       .00    321.00   7463.80


*SECNO  .362

3470 ENCROACHMENT STATIONS=     7183.7    7500.0  TYPE=      1  TARGET=      316.300
      .362      1.93   1368.93   1368.67   1368.05   1369.18       .24      4.90       .02   1367.70
    1447.0     701.7     460.0     285.3     216.4      94.4      72.0      15.8      11.8   1367.50
      .13      3.24      4.87      3.96      .049      .045      .049      .000   1367.00   7183.70
   .010917      625.      480.      480.         6        16         0       .00    316.30   7500.00


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


*SECNO  .474

3470 ENCROACHMENT STATIONS=     7346.8    7880.6  TYPE=      1  TARGET=      533.800
      .474      2.11   1372.91       .00   1371.88   1373.03       .13      3.84       .01   1372.00
    1447.0     872.7     354.5     219.8     355.5      91.4      91.2      20.5      16.1   1372.00
      .17      2.45      3.88      2.41      .049      .045      .049      .000   1370.80   7346.80
   .007113      425.      420.      525.         4         0         0       .00    533.80   7880.60


*SECNO  .623

3470 ENCROACHMENT STATIONS=     8075.0    8400.0  TYPE=      1  TARGET=      325.000
      .623      2.58   1376.58       .00   1375.85   1376.95       .36      3.84       .07   1375.50
    1447.0     855.1     591.9        .0     254.4      93.0        .0      24.5      20.0 100000.00
      .19      3.36      6.37       .00      .049      .045      .000      .000   1374.00   8075.00
   .013722      390.      410.      430.         2         0         0       .00    325.00   8400.00


*SECNO  .773

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.42


3470 ENCROACHMENT STATIONS=     8750.0    9073.0  TYPE=      1  TARGET=      323.000
      .773      3.69   1382.29       .00   1381.39   1382.56       .27      5.61       .01   1380.80
    1447.0     794.2     652.8        .0     288.3     120.9        .0      29.7      24.5 100000.00
      .24      2.76      5.40       .00      .049      .045      .000      .000   1378.60   8750.00
   .006769      600.      600.      600.         5         0         0       .00    323.00   9073.00


*SECNO  .893

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


3470 ENCROACHMENT STATIONS=     9245.6    9580.1  TYPE=      1  TARGET=      334.500
      .893      2.96   1385.96       .00   1385.22   1386.38       .42      3.78       .05   1385.70
    1447.0     909.9     537.1        .0     254.1      74.6        .0      32.9      27.3 100000.00
      .26      3.58      7.20       .00      .049      .045      .000      .000   1383.00   9245.60
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.017131     370.     370.     400.       3        0        0      .00   334.50   9580.10


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


*SECNO 1.016

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


3470 ENCROACHMENT STATIONS=     9675.1    9952.9  TYPE=      1  TARGET=      277.801
    1.016      3.20   1390.90      .00   1390.06   1391.24      .34      4.85      .01   1388.50
   1447.0     845.7     601.3       .0     270.4      96.7       .0      36.0     30.0 100000.00
      .28      3.13      6.22      .00      .049      .045     .000      .000   1387.70   9675.10
  .008739      380.      450.     450.         4         0        0       .00    277.80   9952.90


*SECNO 1.094

3470 ENCROACHMENT STATIONS=     9488.8   10137.5  TYPE=      1  TARGET=      648.700
    1.094      2.78   1394.98      .00   1394.18   1395.12      .13      3.86      .02   1394.00
   1447.0    1157.4     289.6       .0     430.6      78.1       .0      40.4     34.6 100000.00
      .32      2.69      3.71      .00      .049      .045     .000      .000   1392.20   9488.80
  .009092      425.      450.     330.         5         0        0       .00    648.70  10137.50


*SECNO 1.177

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9550.0   10192.9  TYPE=      1  TARGET=      642.900
    1.177      1.53   1400.23   1400.00   1399.73   1400.40      .17      5.27      .01   1399.50
   1447.0    1161.1     285.9       .0     365.1      72.8       .0      45.5     41.2 100000.00
      .36      3.18      3.93      .00      .049      .045     .000      .000   1398.70   9550.00
  .013928      480.      450.     520.        15        14        0       .00    568.39  10192.90


*SECNO 1.285

3470 ENCROACHMENT STATIONS=     9645.0   10015.7  TYPE=      1  TARGET=      370.700
    1.285      1.72   1407.12      .00   1406.58   1407.33      .20      6.92      .01   1406.10
   1447.0    1121.0     326.0       .0     335.3      73.2       .0      50.8     47.1 100000.00
      .41      3.34      4.46      .00      .049      .045     .000      .000   1405.40   9645.00
  .011386      540.      590.     590.         5         0        0       .00    370.70  10015.70


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


*SECNO 1.375
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3470 ENCROACHMENT STATIONS=    9750.9   10000.0  TYPE=      1  TARGET=      249.100
    1.375      1.75   1413.45       .00   1412.45   1413.74       .29      6.38       .03   1412.20
   1447.0     635.2     535.7     276.1     161.6     107.6      73.1      55.5      50.9   1412.10
      .44      3.93      4.98      3.78      .049      .045      .049      .000   1411.70   9750.90
  .011931      520.      620.      500.         4         0         0       .00    249.10  10000.00


*SECNO 1.495
3280 CROSS SECTION      1.50 EXTENDED       .51 FEET


3470 ENCROACHMENT STATIONS=   10027.9   10248.2  TYPE=      1  TARGET=      220.300
       DECREASE DISCHARGE.
       ET CARDS APPLIED AT SECS. 1.4953 TO 2.112 TO BLOCK INEFFECTIVE FLOW
       SEPARATED BY RIDGE ON LEFT SIDE (LOOKING DOWNSTREAM).
    1.495      2.82   1420.82       .00   1420.27   1421.14       .32      7.39       .01   1418.50
   1271.0     825.3     445.7        .0     226.2      75.6        .0      60.3      54.4 100000.00
      .48      3.65      3.89       .00      .049      .045      .000      .000   1418.00  10027.90
  .010554      640.      690.      625.         4         0         0       .00    220.30  10248.20


*SECNO 1.601

3470 ENCROACHMENT STATIONS=    9910.0   10000.0  TYPE=      1  TARGET=       90.000
       DECREASE DISCHARGE.
    1.601      3.48   1427.38       .00   1426.44   1427.99       .61      6.76       .09   1425.70
   1096.0      62.0     977.8      56.2      14.6     150.8      13.7      63.6      56.5   1425.90
      .51      4.23      6.49      4.09      .049      .042      .049      .000   1423.90   9910.00
  .012527      580.      600.      600.         3         0         0       .00     90.00  10000.00


*SECNO 1.668
3280 CROSS SECTION      1.67 EXTENDED       .05 FEET


3470 ENCROACHMENT STATIONS=    9874.1   10000.5  TYPE=      1  TARGET=      126.400
    1.668      2.65   1433.25   1433.15   1432.56   1433.84       .59      5.85       .00   1432.00
   1096.0     364.5     731.5        .0      84.2     105.5        .0      65.3      57.6 100000.00
      .53      4.33      6.93       .00      .049      .042      .000      .000   1430.60   9874.10
  .016756      480.      390.      340.        13        19         0       .00    126.40  10000.50


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


*SECNO 1.730

3470 ENCROACHMENT STATIONS=    9800.0    9940.0  TYPE=      1  TARGET=      140.000
    1.730      2.92   1437.12       .00   1436.15   1437.48       .37      3.62       .02   1435.60
   1096.0     855.7     229.4      10.9     183.0      41.6       3.5      66.5      58.3   1435.80
      .54      4.68      5.51      3.10      .049      .042      .049      .000   1434.20   9800.00
  .012312      200.      320.      350.         4         0         0       .00    140.00   9940.00


*SECNO 1.808

3470 ENCROACHMENT STATIONS=    9864.3    9988.5  TYPE=      1  TARGET=      124.200
    1.808      2.89   1442.59       .00   1441.91   1443.21       .62      5.65       .08   1440.90
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   1096.0     870.2     423.8       .0     128.1      55.1       .0      88.2      39.4 100000.00
     .56      5.23      7.73      .00      .049      .042      .000      .000   1439.70   9864.30
 .019649      350.      410.      415.         4         0         0       .00    124.20   9988.50


*SECNO 1.860
3280 CROSS SECTION      1.86 EXTENDED       .64 FEET


3470 ENCROACHMENT STATIONS=     9972.0   10032.3  TYPE=      1  TARGET=       60.300
    1.860      2.94   1446.84       .00   1446.01   1447.70       .87      4.42       .07   1444.70
   1096.0     294.8     801.2        .0      52.4      99.7        .0      69.3      60.0 100000.00
      .57      5.63      8.04       .00      .049      .042      .000      .000   1443.90   9972.00
 .013991      260.      275.      320.         3         0         0       .00     60.30  10032.30


*SECNO 1.917

3470 ENCROACHMENT STATIONS=     9864.7    9965.6  TYPE=      1  TARGET=      100.899
    1.917      2.53   1451.33       .00   1450.53   1452.01       .68      4.28       .02   1449.90
   1096.0     617.4     474.7       3.9     115.8      59.5       1.5      70.3      60.4   1449.50
      .58      5.33      7.98      2.70      .049      .042      .049      .000   1448.80   9864.70
 .017225      230.      310.      320.         3         0         0       .00    100.90   9965.60


*SECNO 1.975

3470 ENCROACHMENT STATIONS=     9985.3   10082.8  TYPE=      1  TARGET=       97.500
    1.975      1.99   1455.99       .00   1455.55   1456.58       .59      4.57       .01   1454.90
   1096.0        .0    1096.0        .0        .0     177.1        .0      71.5      61.1 100000.00
      .59       .00      6.19       .00      .000      .042      .000      .000   1454.00   9985.30
 .014293      270.      300.      330.         2         0         0       .00     97.50  10082.80


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


*SECNO 2.027

3470 ENCROACHMENT STATIONS=     9955.8   10055.5  TYPE=      1  TARGET=       99.700
    2.027      3.70   1459.80       .00   1459.06   1460.46       .66      3.86       .02   1458.10
   1096.0        .0     579.5     516.5        .0      75.7     104.8      72.5      61.7   1458.00
      .61       .00      7.65      4.93      .000      .042      .049      .000   1456.10   9955.80
 .015338      220.      270.      230.         2         0         0       .00     99.70  10055.50


*SECNO 2.072

3470 ENCROACHMENT STATIONS=    10020.6   10066.5  TYPE=      1  TARGET=       45.900
       DECREASE DISCHARGE FOR FLOW FROM CULVERT  STRUC. NOS. 50 AND 51.
    2.072      3.25   1463.15       .00   1462.73   1464.24      1.09      3.65       .13   1461.10
    982.0        .0     982.0        .0        .0     117.3        .0      73.3      62.0 100000.00
      .61       .00      8.37       .00      .000      .042      .000      .000   1459.90  10020.60
 .017667      220.      230.      200.         2         0         0       .00     45.90  10066.50


*SECNO 2.112

3301 HV CHANGED MORE THAN HVINS
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3470 ENCROACHMENT STATIONS=     9996.5   10120.0  TYPE=      1  TARGET=      123.500
    2.112      3.10   1466.50       .00   1466.21   1467.24       .43      2.93       .07   1464.50
    982.0       .0     235.1     746.9       .0      36.3     154.1      74.0      62.4   1464.60
      .62      .00      6.47      4.85      .000      .042      .049      .000   1463.70   9996.50
  .011215     210.      215.      205.         3         0         0       .00    123.50  10120.00


*SECNO 2.157

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    10004.0   10034.4  TYPE=      1  TARGET=       30.400
       DECREASE DISCHARGE FOR FLOW FROM STRUC. NO. 50.
       ENCROACHMENT (ET CARD) APPLIED TO LIMIT EFFECTIVE FLOW TO WITHIN 3:1
       FLARE ANGLE DOWNSTREAM OF STRUC. #50.
    2.157      3.19   1471.09   1471.09   1470.58   1472.60      1.51      3.56       .32   1468.40
    891.0       .0     891.0       .0        .0      90.4        .0      74.8      62.8 100000.00
      .63      .00      9.85       .00      .000      .042      .000      .000   1467.90  10004.00
  .022621     250.      240.      225.         3         8         0       .00     30.40  10034.40


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


CCHV=     .300 CEHV=     .500
*SECNO 2.172
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1474.10 ELREA=      1474.10

       BEGIN SUN VALLEY PARKWAY CULVERTS (3- 10' X 3' RCBS.,  STRUC. NO. 50).
    2.172      2.88   1473.48   1473.48   1473.48   1474.93      1.45      1.50       .02   1474.10
    891.0       .0     891.0       .0        .0      92.1        .0      74.9      62.9   1474.10
      .63      .00      9.68       .00      .000      .035      .000      .000   1470.60   9984.00
  .015826      80.       80.       80.         2        11         0       .00     32.00  10016.00


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
    3         .012      .20       2.90      .00       3.00      10.00     169.00    12        3         1471.30   1470.60

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE  3 - WINGWALLS FLARED 18.4 DEGREES (3:1); INLET SKEWED 30 DEGREES

5140, NORMAL DEPTH EXCEEDS CULVERT HEIGHT
*SECNO 2.204

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  7.39
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SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1479.26	1477.12	2.31	217.	895.	6.562	90.0	1475.00	72.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1477.50 ELREA= 1477.50

END CULVERTS. NO WEIR FLOW OVER ROAD EXPECTED.
INCREASE DISCHARGE AT THIS SECTION OF WHICH 891 CFS FLOWS THROUGH
STRUCT. #50 AND 217 CFS FLOWS ON TO STRUCS. NO. 51 AND 52

2.204	5.27	1476.57	.00	1476.57	1477.24	.67	2.31	.00	1477.50
1107.0	.0	1107.0	.0	.0	168.7	.0	75.4	63.0	1477.50
.64	.00	6.36	.00	.000	.012	.000	.000	1471.30	9984.00
.000447	169.	169.	169.	3	0	0	.00	32.00	10016.00

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

*SECNO 2.216

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

3470 ENCROACHMENT STATIONS= 9980.0 10042.0 TYPE= 1 TARGET= 62.000
ET CARD USED TO LIMIT EFFECTIVE FLOW TO WITHIN 1:1 FLARE ANGLE UPSTREAM
OF CULVERT.

2.216	5.08	1477.08	.00	1477.08	1477.38	.30	.03	.11	100000.00
1107.0	.0	971.5	135.5	.0	212.7	46.1	75.6	63.1	1473.00
.64	.00	4.57	2.94	.000	.035	.035	.000	1472.00	9980.00
.001578	35.	38.	38.	2	0	0	.00	62.00	10042.00

CCHV= .100 CEHV= .300
*SECNO -2.112
START TRIB COMP

-2.112	2.112	1466.803	

3470 ENCROACHMENT STATIONS= 9996.5 10120.0 TYPE= 1 TARGET= 123.500
REPEAT SECTION TO BEGIN TRIB. ANALYSIS FOR TRIBUTARY "A" TO STRUC.#51.
ADD 10 TO ALL SECTION NOS. TO IDENTFY TRIB."A"

-2.112	3.10	1466.80	.00	1466.21	1467.24	.43	.00	.00	1464.50
982.0	.0	235.1	746.9	.0	36.3	154.1	76.7	63.5	1464.60
.65	.00	6.47	4.85	.000	.042	.049	.000	1463.70	9996.50
.011210	210.	215.	205.	0	0	0	.00	123.50	10120.00

CCHV= .300 CEHV= .500
*SECNO 12.152
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1472.40 ELREA= 1472.40

DECREASE DISCHARGE TO 91 CFS FOR FLOW THROUGH STRUC. #51.

BEGIN SUN VALLEY PARKWAY CULVERTS (2-42" X 29" CSPAG. STRUC. NO.51).

12.152	1.73	1469.33	1469.33	1470.25	1470.21	.87	2.44	.22	1472.40
91.0	.0	91.0	.0	.0	12.1	.0	77.1	63.8	1472.40
.66	.00	7.50	.00	.000	.042	.000	.000	1467.60	9996.50
.036879	215.	215.	180.	20	11	0	.00	7.00	10003.50

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

SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	5.84	2.90	.00	7.00	1.70	12.80	.00	1470.80	1467.60

*SECNO 12.181

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	HJ	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1495.40	1476.09	3.66	120.	97.	13.	13.	1473.22	1473.70	89.

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1475.60 ELREA= 1475.60

END CULVERTS. NO WEIR FLOW OVER ROAD EXPECTED.
INCREASE DISCHARGE AT THIS SEC.TO 217 CFS OF WHICH 91 CFS FLOWS TO
STRUC. 51, 128CFS FLOWS TO STRUC. 52.

12.181	3.14	1473.94	1473.89	1473.98	1475.45	1.52	2.60	-2.60	1475.60
217.0	.0	217.0	.0	.0	22.0	.0	77.2	63.8	1475.60
.67	.00	9.88	.00	.000	.024	.000	.000	1470.80	9996.50
.013010	155.	155.	155.	20	14	0	.00	7.00	10003.50

*SECNO 12.189

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.47

3470 ENCROACHMENT STATIONS= 9970.5 10076.0 TYPE= 1 TARGET= 105.500

12.189	1.86	1475.96	1475.52	1475.97	1476.05	.09	.17	.43	1474.96
217.0	49.3	64.2	103.4	14.3	24.0	71.8	77.3	63.9	1474.90
.67	3.44	2.67	1.44	.016	.035	.049	.000	1474.10	9970.50
.002137	40.	40.	40.	16	13	0	.00	105.50	10076.00

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


CCHV=     .100 CEHV=     .300
*SECNO 12.197
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9949.4   10009.7  TYPE=      1  TARGET=       60.300
   12.197      1.99   1476.38   1476.38   1476.40   1476.79       .40       .16       .09   1475.28
    217.0     105.3     111.7        .0      19.3      23.6        .0      77.3      64.0 100000.00
      .67      5.47      4.73       .00      .016      .035      .000      .000   1474.39   9950.73
  .007945       43.       43.       43.        20         8         0       .00     58.82  10009.55


*SECNO 12.209

3470 ENCROACHMENT STATIONS=     9947.3   10008.5  TYPE=      1  TARGET=       61.200
       UPSTREAM END TRIB."A"  ANALYSIS
   12.209      1.92   1476.92       .00   1476.90   1477.29       .37       .50       .00   1475.93
    217.0      75.6     122.4      19.0      15.2      24.2       6.8      77.4      64.0   1475.00
      .68      4.97      5.06      2.79      .016      .035      .049      .000   1475.00   9950.27
  .007516       65.       65.       65.         2         0         0       .00     58.23  10008.50


CCHV=     .100 CEHV=     .300
*SECNO -2.027
START TRIB COMP
    -2.027     2.027  1459.797

3470 ENCROACHMENT STATIONS=     9955.8   10055.5  TYPE=      1  TARGET=       99.700
       REPEAT SEC. FOR START OF TRIB. "B" ANALYSIS. ADD 20 TO ALL SEC. NOS.
       TO IDENTIFY TRIB. "B".
   -2.027      3.70   1459.80       .00   1459.06   1460.46       .66       .00       .00   1458.10
   1096.0        .0     579.6     516.4        .0      75.7     104.7      78.0      64.5   1458.00
      .69       .00      7.66      4.93      .000      .042      .049      .000   1456.10   9955.80
  .015363      220.      270.      230.         0         0         0       .00     99.70  10055.50


*SECNO 22.080

3301 HV CHANGED MORE THAN HVINS

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


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


3470 ENCROACHMENT STATIONS=    10252.5   10297.7  TYPE=      1  TARGET=       45.200
       DECREASE DISCHARGE TO 117 CFS FLOW THROUGH STRUC. 52.
   22.080      2.30   1462.20       .00   1461.55   1462.23       .03      1.71       .06   1460.60
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   117.0      9.7     107.2       .1      .0.7      67.6       .3      78.6      64.8   1461.50
     .72      .89      1.54      .37      .049      .042      .047      .000   1459.90  10252.50
 .000753     200.      200.     200.         3         0         0       .00     45.20  10297.70


CCHV=     .300 CEHV=     .500
*SECNO 22.097

3301 HV CHANGED MORE THAN HVINS

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1465.70 ELREA=      1465.70

        BEGIN SUN VALLEY PARKWAY CULVERTS (2-49" X 33" CSPAS. STRUC. NO 52)
   22.097     1.80   1463.70   1463.70   1463.70   1464.61       .91       .21       .44   1465.70
    117.0       .0     117.0       .0        .0      15.3        .0      78.7      64.9   1465.70
      .73      .00      7.65      .00      .000      .042      .000      .000   1461.90   9995.75
 .034174      90.       90.       90.        20        15         0       .00      8.50  10004.25


SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS    1463.11 , NOT    1463.70 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     1.25      5.36      2.90       .00      8.50      2.17     17.40       .00   1465.00   1461.90

*SECNO 22.129

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.16

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


CLASS B LOW FLOW

3420 BRIDGE W.S.=    1465.65 BRIDGE VELOCITY=       8.41     CALCULATED CHANNEL AREA=        4.

 EGPRS      EGLWC       HJ       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC      ELTRD     WEIRLN
                                                                 AREA
   1467.46   1468.57      .00        0.      117.       17.       17.     1467.75   1468.80        0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1468.80 ELREA=      1468.80

        END CULVERTS.  NO WEIR FLOW OVER ROAD EXPECTED.
   22.129     3.30   1468.30       .00   1468.30   1468.57       .27      3.97       .00   1468.80
    117.0       .0     117.0       .0        .0      28.1        .0      78.8      64.9   1468.80
      .74      .00      4.16      .00      .000      .024      .000      .000   1465.00   9995.75
 .001979     169.      169.     169.         0         0         0       .00      8.50  10004.25
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*SECNO 22.140
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9977.6   10009.3  TYPE=      1  TARGET=       31.700
       INCREASE DISCHARGE TO 128CFS WHICH SPLITS ALONG RD. FROM STRUC.51.
       THIS FLOW IS ATTENUATED FROM 128CFS TO 117CFS AS IT IS ROUTED THROUGH
       STRUC. 52.
    22.140      1.81   1471.81   1471.81   1471.82   1472.22       .41       .23       .07   1471.31
     128.0      11.1     116.9        .0       2.7      22.5        .0      78.9      64.9 100000.00
       .74      4.18      5.19       .00      .016      .035      .000      .000   1470.00   9977.94
   .011573       55.       55.       55.        20        11         0       .00     31.30  10009.24


*SECNO 22.182

3470 ENCROACHMENT STATIONS=     9960.4   10043.7  TYPE=      1  TARGET=       83.300
    22.182       .77   1474.47       .00   1474.47   1474.70       .23      2.43       .05   1473.70
     128.0      52.8      27.4      47.9      10.5       7.7      22.9      79.0      65.2   1473.70
       .76      5.04      3.56      2.09      .016      .035      .049      .000   1473.70   9960.53
   .009948      227.      227.      227.         3         0         0       .00     83.17  10043.69


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   06MAY93      11:52:33                                                                          PAGE   40


                                                                    THIS RUN EXECUTED 06MAY93    11:55:17
************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.0;  February 1991
************************************


NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST


WASH NO 8 100 YEAR PROFI

SUMMARY PRINTOUT


      SECNO       Q      CWSEL     CRIWS      VCH      XLCH     STCHL     STCHR    STENCL    STENCR     SSTA     ENDST

       .114  1447.00   1355.81       .00      2.83       .00   7289.10   7333.30       .00       .00   5858.38  10023.35
       .114  1447.00   1356.81       .00      4.38       .00   7289.10   7333.30   7289.10   7621.26   7289.10   7621.26

       .265  1447.00   1363.10       .00      1.99   1070.00   7371.70   7463.80       .00       .00   5517.51   9995.02
       .265  1447.00   1364.09       .00      3.78   1070.00   7371.70   7463.80   7142.80   7463.80   7142.80   7463.80

       .362  1447.00   1368.05       .00      3.18    480.00   7393.70   7450.00       .00       .00   4916.03  10017.91
       .362  1447.00   1368.93   1368.67      4.87    480.00   7393.70   7450.00   7183.70   7500.00   7183.70   7500.00

*      .474  1447.00   1371.88       .00      1.89    420.00   7725.00   7780.60       .00       .00   5313.30   9986.02
       .474  1447.00   1372.91       .00      3.88    420.00   7725.00   7780.60   7346.80   7880.60   7346.80   7880.60

*      .623  1447.00   1375.85   1375.85      5.11    410.00   8357.50   8400.00       .00       .00   5657.59  10005.93
       .623  1447.00   1376.58       .00      6.37    410.00   8357.50   8400.00   8075.00   8400.00   8075.00   8400.00

*      .773  1447.00   1381.39       .00      4.24    600.00   9032.70   9073.40       .00       .00   6256.79  10235.47
*      .773  1447.00   1382.29       .00      5.40    600.00   9032.70   9073.40   8750.00   9073.00   8750.00   9073.00
```

*	.893	1447.00	1385.22	1385.22	5.37	370.00	9547.10	9580.10	.00	.00	6711.17	10725.09
*	.893	1447.00	1385.96	.00	7.20	370.00	9547.10	9580.10	9245.60	9580.10	9245.60	9580.10
*	1.016	1447.00	1390.06	1390.06	5.27	450.00	9920.90	9952.90	.00	.00	7160.15	11066.40
*	1.016	1447.00	1390.90	.00	6.22	450.00	9920.90	9952.90	9675.10	9952.90	9675.10	9952.90
	1.094	1447.00	1394.18	.00	2.02	450.00	10077.30	10137.50	.00	.00	7452.07	10909.27
	1.094	1447.00	1394.98	.00	3.71	450.00	10077.30	10137.50	9488.80	10137.50	9488.80	10137.50
*	1.177	1447.00	1399.73	1399.73	4.58	450.00	10121.20	10192.90	.00	.00	7944.92	10685.24
	1.177	1447.00	1400.23	1400.00	3.93	450.00	10121.20	10192.90	9550.00	10192.90	9550.00	10192.90
*	1.283	1447.00	1406.58	.00	2.38	590.00	9965.30	10015.70	.00	.00	8255.45	10572.71
	1.283	1447.00	1407.12	.00	4.46	590.00	9965.30	10015.70	9645.00	10015.70	9645.00	10015.70

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	SECND	Q	CWBEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	1.375	1447.00	1412.45	.00	4.14	620.00	9874.70	9941.00	.00	.00	8494.00	10468.32
	1.375	1447.00	1413.45	.00	4.98	620.00	9874.70	9941.00	9750.90	10000.00	9750.90	10000.00
*	1.495	1271.00	1420.27	.00	3.85	690.00	10216.40	10248.20	8981.40	10284.10	8988.52	10282.11
	1.495	1271.00	1420.82	.00	5.89	690.00	10216.40	10248.20	10027.90	10248.20	10027.90	10248.20
*	1.601	1096.00	1426.44	1426.44	5.32	600.00	9918.90	9990.70	9436.10	10180.40	9448.30	10088.57
	1.601	1096.00	1427.38	.00	6.49	600.00	9918.90	9990.70	9910.00	10000.00	9910.00	10000.00
	1.668	1096.00	1432.56	.00	4.11	390.00	9945.70	10000.50	9369.30	10040.00	9380.25	10032.93
	1.668	1096.00	1433.25	1433.15	6.93	390.00	9945.70	10000.50	9874.10	10000.50	9874.10	10000.50
*	1.730	1096.00	1436.15	1436.15	4.13	320.00	9912.30	9937.30	9532.60	10142.10	9538.18	10093.35
	1.730	1096.00	1437.12	.00	5.51	320.00	9912.30	9937.30	9800.00	9940.00	9800.00	9940.00
*	1.808	1096.00	1441.91	.00	4.60	410.00	9962.10	9988.50	9592.50	10215.60	9603.54	10155.99
	1.808	1096.00	1442.59	.00	7.73	410.00	9962.10	9988.50	9864.30	9988.50	9864.30	9988.50
*	1.860	1096.00	1446.01	1446.01	6.55	275.00	9997.50	10032.30	9478.70	10090.20	9689.92	10055.13
	1.860	1096.00	1446.84	.00	8.04	275.00	9997.50	10032.30	9972.00	10032.30	9972.00	10032.30
	1.917	1096.00	1450.53	.00	6.06	310.00	9938.50	9964.80	9760.40	10235.00	9802.13	10193.40
	1.917	1096.00	1451.33	.00	7.98	310.00	9938.50	9964.80	9864.70	9965.60	9864.70	9965.60
	1.975	1096.00	1455.55	.00	5.38	300.00	9985.30	10082.80	9973.50	10266.50	9978.88	10181.82
	1.975	1096.00	1455.99	.00	6.19	300.00	9985.30	10082.80	9985.30	10082.80	9985.30	10082.80
	2.027	1096.00	1459.06	.00	5.82	270.00	9955.80	9986.80	9922.60	10234.00	9943.34	10123.81
	2.027	1096.00	1459.80	.00	7.65	270.00	9955.80	9986.80	9955.80	10055.50	9955.80	10055.50
*	2.072	982.00	1462.73	1462.73	6.40	230.00	10020.60	10066.50	9942.20	10153.50	9943.45	10148.23
	2.072	982.00	1463.15	.00	8.37	230.00	10020.60	10066.50	10020.60	10066.50	10020.60	10066.50
*	2.112	982.00	1466.21	1466.21	8.08	215.00	9996.50	10010.10	9975.50	10200.30	9978.45	10159.72
	2.112	982.00	1466.80	.00	6.47	215.00	9996.50	10010.10	9996.50	10120.00	9996.50	10120.00
*	2.157	891.00	1470.58	1470.58	8.27	240.00	10004.00	10034.40	9958.00	10042.00	9962.90	10042.00
*	2.157	891.00	1471.09	1471.09	9.85	240.00	10004.00	10034.40	10004.00	10034.40	10004.00	10034.40
*	2.172	891.00	1473.48	1473.48	9.67	80.00	9984.00	10016.00	.00	.00	9984.00	10016.00
*	2.172	891.00	1473.48	1473.48	9.68	80.00	9984.00	10016.00	.00	.00	9984.00	10016.00
*	2.204	1107.00	1476.57	.00	6.56	169.00	9984.00	10016.00	.00	.00	9984.00	10016.00
*	2.204	1107.00	1476.57	.00	6.56	169.00	9984.00	10016.00	.00	.00	9984.00	10016.00

*	2.216	1107.00	1477.06	.00	4.57	38.00	9915.00	10023.00	9980.00	10042.00	9980.00	10042.00
*	2.216	1107.00	1477.08	.00	4.57	38.00	9915.00	10023.00	9980.00	10042.00	9980.00	10042.00
*	-2.112	982.00	1466.21	1466.21	8.08	215.00	9996.50	10010.10	9975.50	10200.30	9973.45	10159.72
	-2.112	982.00	1466.80	.00	6.47	215.00	9996.50	10010.10	9996.50	10120.00	9996.50	10120.00

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	SECNO	Q	CWSEL	CRIWS	VCH	XLCH	STCHL	STCHR	STENCL	STENCR	SSTA	ENDST
*	12.152	91.00	1470.25	.00	4.91	215.00	9996.50	10003.50	.00	.00	9996.50	10003.50
*	12.152	91.00	1469.33	1469.33	7.50	215.00	9996.50	10003.50	.00	.00	9996.50	10003.50
*	12.181	217.00	1473.98	.00	9.74	155.00	9996.50	10003.50	.00	.00	9996.50	10003.50
*	12.181	217.00	1473.94	1473.89	9.88	155.00	9996.50	10003.50	.00	.00	9996.50	10003.50
*	12.189	217.00	1475.97	1475.50	2.60	40.00	9991.00	10006.00	.00	.00	9949.32	10084.35
*	12.189	217.00	1475.96	1475.52	2.67	40.00	9991.00	10006.00	9970.50	10076.00	9970.50	10076.00
*	12.197	217.00	1476.40	1476.40	4.58	43.00	9993.00	10010.00	.00	.00	9949.70	10009.63
*	12.197	217.00	1476.38	1476.38	4.73	43.00	9993.00	10010.00	9949.40	10009.70	9950.73	10009.55
	12.209	217.00	1476.90	1476.90	5.25	65.00	9989.00	10003.00	.00	.00	9951.55	10010.60
	12.209	217.00	1476.92	.00	5.06	65.00	9988.00	10003.00	9947.30	10008.50	9950.27	10008.50
	-2.027	1096.00	1459.06	.00	5.80	270.00	9955.80	9986.80	9922.60	10234.00	9943.31	10123.83
	-2.027	1096.00	1459.80	.00	7.66	270.00	9955.80	9986.80	9955.80	10055.50	9955.80	10055.50
*	22.080	117.00	1461.55	.00	2.37	200.00	10262.30	10297.20	10153.50	10351.70	10252.29	10297.90
*	22.080	117.00	1462.20	.00	1.54	200.00	10262.30	10297.20	10252.50	10297.70	10252.50	10297.70
*	22.097	117.00	1463.70	1463.70	7.65	90.00	9995.75	10004.25	.00	.00	9995.75	10004.25
*	22.097	117.00	1463.70	1463.70	7.65	90.00	9995.75	10004.25	.00	.00	9995.75	10004.25
*	22.129	117.00	1468.30	.00	4.16	169.00	9995.75	10004.25	.00	.00	9995.75	10004.25
*	22.129	117.00	1468.30	.00	4.16	169.00	9995.75	10004.25	.00	.00	9995.75	10004.25
*	22.140	128.00	1471.82	1471.82	5.15	55.00	9991.00	10010.00	.00	.00	9977.61	10009.27
*	22.140	128.00	1471.81	1471.81	5.19	55.00	9991.00	10010.00	9977.60	10009.30	9977.94	10009.24
	22.182	128.00	1474.47	1474.46	3.58	227.00	9992.00	10002.00	.00	.00	9960.70	10043.66
	22.182	128.00	1474.47	.00	3.56	227.00	9992.00	10002.00	9960.40	10043.70	9960.53	10043.69

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WASH ND 8 100 YEAR PROFI

SUMMARY PRINTOUT

SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
.114	736.95	131.90	578.15	1.81	2.83	1.28	1356.80	1355.81	.00	2495.92	1354.20	1.19
.114	.00	396.38	1050.62	.00	4.36	2.93	1356.80	1356.81	.00	332.16	1354.20	1.11
.265	750.54	112.01	584.44	1.56	1.99	1.66	1364.20	1363.10	7.28	1940.97	1362.00	1.01
.265	892.20	554.79	.00	3.03	3.78	.00	1364.20	1364.09	7.28	321.00	1362.00	1.04
.362	475.88	141.77	829.35	1.46	3.18	1.82	1370.00	1368.05	4.96	3183.27	1367.00	1.17
.362	701.71	460.04	285.26	3.24	4.87	3.96	1370.00	1368.93	4.85	316.30	1367.00	1.10

*	.474	717.25	86.83	662.92	1.21	1.89	1.43	1372.50	1371.88	3.82	2724.34	1370.80	1.04
	.474	872.66	354.53	219.60	2.45	3.88	2.41	1375.80	1372.91	3.97	533.80	1370.80	1.13
*	.623	805.70	315.15	326.15	1.93	5.11	1.55	1376.30	1375.85	3.96	2688.35	1374.00	1.89
	.623	855.05	591.94	.00	3.36	6.37	.00	1379.40	1376.58	3.68	325.00	1374.00	1.34
*	.773	690.97	360.68	395.35	2.01	4.24	2.60	1382.10	1381.39	5.54	1021.35	1378.60	1.33
*	.773	794.22	652.78	.00	2.76	5.40	.00	1384.00	1382.29	5.71	323.00	1378.60	1.38
*	.893	1049.12	271.70	126.18	2.19	5.37	3.28	1385.70	1385.22	3.83	1655.73	1383.00	1.51
*	.893	909.85	537.14	.00	3.58	7.20	.00	1386.10	1385.96	3.67	334.50	1383.00	1.41
*	1.016	1020.37	368.59	58.03	1.55	5.27	1.16	1390.20	1390.06	4.84	2949.74	1387.70	2.55
*	1.016	845.67	601.33	.00	3.13	6.22	.00	1391.70	1390.90	4.94	277.80	1387.70	1.40
	1.094	1381.64	59.89	5.47	1.83	2.02	.60	1394.20	1394.18	4.12	2326.93	1392.20	1.01
	1.094	1157.36	289.64	.00	2.69	3.71	.00	1395.80	1394.98	4.08	648.70	1392.20	1.05
*	1.177	1269.73	174.26	3.01	3.82	4.58	1.14	1401.80	1399.73	5.55	817.51	1398.70	1.02
	1.177	1161.06	285.94	.00	3.18	3.93	.00	1402.60	1400.23	5.25	568.39	1398.70	1.02
*	1.285	1293.70	108.90	44.40	1.63	2.38	.85	1408.00	1406.58	6.85	2021.84	1405.40	1.07
	1.285	1120.96	326.04	.00	3.34	4.46	.00	1408.00	1407.12	6.89	370.70	1405.40	1.05
*	1.375	1120.39	174.99	151.62	2.76	4.14	1.86	1414.00	1412.45	5.87	1540.93	1411.70	1.12
	1.375	635.24	535.68	276.08	3.93	4.98	3.78	1414.00	1413.45	6.32	249.10	1411.70	1.05
*	1.495	1036.54	224.63	9.83	1.78	3.85	1.02	1420.30	1420.27	7.82	1258.39	1418.00	1.37
	1.495	825.30	445.70	.00	3.65	5.89	.00	1420.30	1420.82	7.37	220.30	1418.00	1.17
*	1.601	587.42	444.85	63.73	2.65	5.32	2.05	1428.00	1426.44	6.17	640.27	1423.90	1.46
	1.601	61.99	977.82	56.19	4.23	6.49	4.09	1428.00	1427.38	6.56	90.00	1423.90	1.05
	1.668	788.34	278.65	29.01	2.45	4.11	1.91	1433.20	1432.56	6.12	651.42	1430.60	1.19
	1.668	364.47	731.53	.00	4.33	6.93	.00	1433.20	1433.25	5.87	126.40	1430.60	1.15
*	1.730	938.07	71.66	86.27	4.33	4.13	2.17	1438.50	1436.15	3.59	554.11	1434.20	1.09
	1.730	855.69	229.41	10.90	4.68	5.51	3.10	1438.50	1437.12	3.87	140.00	1434.20	1.02

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	SECND	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
*	1.808	303.85	170.06	622.09	2.20	4.60	3.49	1443.90	1441.91	5.77	508.98	1439.70	1.20
	1.808	670.24	425.76	.00	5.23	7.73	.00	1443.90	1442.59	5.47	124.20	1439.70	1.12
*	1.860	566.86	464.30	64.82	3.80	6.55	3.61	1446.20	1446.01	4.10	365.21	1443.90	1.25
	1.860	294.85	801.15	.00	5.63	8.04	.00	1446.20	1446.84	4.25	60.30	1443.90	1.07
	1.917	230.89	231.33	633.78	3.03	6.06	3.84	1452.40	1450.53	4.51	391.27	1448.80	1.18
	1.917	617.42	474.66	3.92	5.33	7.98	2.70	1452.40	1451.33	4.49	100.90	1448.80	1.13
	1.975	3.71	726.62	365.67	1.76	5.38	3.84	1458.50	1455.55	5.03	202.96	1454.00	1.08
	1.975	.00	1096.00	.00	.00	6.19	.00	1458.50	1455.99	4.66	97.50	1454.00	1.00
	2.027	17.52	307.35	771.12	2.54	5.82	4.61	1462.00	1459.06	3.51	180.47	1456.10	1.05
	2.027	.00	579.49	516.51	.00	7.65	4.93	1462.00	1459.80	3.81	99.70	1456.10	1.15
*	2.072	218.13	626.79	137.08	3.22	6.40	2.60	1465.10	1462.73	3.66	204.78	1459.90	1.45
	2.072	.00	982.00	.00	.00	8.37	.00	1465.10	1463.15	3.35	45.90	1459.90	1.00
*	2.112	49.58	228.39	704.02	4.15	8.08	5.31	1468.20	1466.21	3.48	158.79	1463.70	1.12
	2.112	.00	235.15	746.85	.00	6.47	4.85	1468.20	1466.80	3.66	123.50	1463.70	1.05

*	2.157	188.33	819.36	83.11	4.41	8.27	5.40	1472.90	1470.58	4.37	79.10	1467.90	1.21
*	2.157	.00	891.00	.00	.00	7.85	.00	1472.90	1471.09	4.29	30.40	1467.90	1.00
*	2.172	.00	891.00	.00	.00	9.67	.00	1474.10	1473.48	2.89	32.00	1470.60	1.00
*	2.172	.00	891.00	.00	.00	9.68	.00	1474.10	1473.46	2.38	32.00	1470.60	1.00
*	2.204	.00	1107.00	.00	.00	6.56	.00	1477.50	1476.57	3.09	32.00	1471.30	1.00
*	2.204	.00	1107.00	.00	.00	6.56	.00	1477.50	1476.57	3.09	32.00	1471.30	1.00
*	2.216	.00	971.48	135.52	.00	4.57	2.94	1478.00	1477.08	.51	62.00	1472.00	1.06
*	2.216	.00	971.46	135.54	.00	4.57	2.94	1478.00	1477.08	.51	62.00	1472.00	1.06
*	-2.112	49.58	228.39	704.02	4.15	8.08	5.31	1468.20	1466.21	-10.87	158.79	1463.70	1.12
	-2.112	.00	235.13	746.87	.00	6.47	4.85	1468.20	1466.80	-10.28	123.50	1463.70	1.05
*	12.152	.00	91.00	.00	.00	4.91	.00	1472.40	1470.25	4.04	7.00	1467.60	1.00
*	12.152	.00	91.00	.00	.00	7.50	.00	1472.40	1469.33	2.53	7.00	1467.60	1.00
*	12.181	.00	217.00	.00	.00	9.74	.00	1475.60	1473.98	3.73	7.00	1470.80	1.00
*	12.181	.00	217.00	.00	.00	9.88	.00	1475.60	1473.94	4.60	7.00	1470.80	1.00
*	12.189	53.07	62.67	101.27	2.77	2.60	1.37	1476.00	1475.97	1.99	135.03	1474.10	1.37
*	12.189	49.34	64.21	103.45	3.44	2.67	1.44	1476.00	1475.96	2.03	105.50	1474.10	1.50
*	12.197	107.33	109.66	.00	5.32	4.58	.00	1477.00	1476.40	.44	59.93	1474.39	1.02
*	12.197	105.34	111.66	.00	5.47	4.73	.00	1477.00	1476.38	.42	58.82	1474.39	1.02
	12.209	73.13	125.04	18.82	5.13	5.25	2.61	1477.60	1476.90	.50	59.05	1475.00	1.10
	12.209	75.56	122.45	18.99	4.97	5.06	2.79	1478.00	1476.92	.54	58.23	1475.00	1.08

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	SECNO	QLOB	QCH	QROB	VLOB	VCH	VROB	TELMX	CWSEL	DIFWSX	TOPWID	ELMIN	ALPHA
	-2.027	17.64	307.17	771.19	2.54	5.80	4.60	1462.00	1459.06	-17.84	180.52	1456.10	1.05
	-2.027	.00	579.60	516.40	.00	7.66	4.93	1462.00	1459.80	-17.13	99.70	1456.10	1.15
*	22.080	4.80	112.20	.00	1.04	2.37	.02	1465.10	1461.55	2.49	45.61	1459.90	1.07
*	22.080	9.69	107.18	.12	.89	1.54	.37	1465.10	1462.20	2.40	45.20	1459.90	1.07
*	22.097	.00	117.00	.00	.00	7.65	.00	1465.70	1463.70	2.15	8.50	1461.90	1.00
*	22.097	.00	117.00	.00	.00	7.65	.00	1465.70	1463.70	1.50	8.50	1461.90	1.00
*	22.129	.00	117.00	.00	.00	4.16	.00	1468.80	1468.30	4.60	8.50	1465.00	1.00
*	22.129	.00	117.00	.00	.00	4.16	.00	1468.80	1468.30	4.61	8.50	1465.00	1.00
*	22.140	11.40	116.59	.00	4.17	5.15	.00	1473.00	1471.82	3.51	31.66	1470.00	1.01
*	22.140	11.08	116.92	.00	4.18	5.19	.00	1473.00	1471.81	3.51	31.30	1470.00	1.01
	22.182	52.64	27.45	47.90	5.08	3.58	2.10	1475.00	1474.47	2.65	82.96	1473.70	1.53
	22.182	52.77	27.37	47.87	5.04	3.56	2.09	1475.00	1474.47	2.66	83.17	1473.70	1.53

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WASH NO B 100 YEAR PROFI

SUMMARY PRINTOUT

SECNO	XLCH	K*CHSL	E6	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
.114	.00	.00	1355.86	.05	.00	.00	68.97	.00	1.61	49.00	45.00	49.00

	.114	.00	.00	1358.99	.18	.00	.00	70.29	.00	2.61	.00	49.00	49.00
	.265	1070.00	7.29	1363.14	.04	7.28	.00	69.77	21.26	1.10	49.00	45.00	49.00
	.265	1070.00	7.29	1364.26	.17	7.27	.00	71.66	10.40	2.09	49.00	45.00	.00
	.362	480.00	10.42	1368.11	.06	4.97	.00	125.97	32.05	1.05	49.00	45.00	49.00
	.362	480.00	10.42	1369.18	.24	4.90	.02	109.17	15.79	1.93	49.00	45.00	49.00
*	.474	420.00	9.05	1371.91	.03	3.80	.00	55.07	42.45	1.08	49.00	45.00	49.00
	.474	420.00	9.05	1373.03	.13	3.84	.01	71.13	20.46	2.11	49.00	45.00	49.00
*	.623	410.00	7.80	1375.98	.13	3.45	.03	147.88	50.77	1.85	49.00	45.00	49.00
	.623	410.00	7.80	1376.95	.36	3.84	.07	137.22	24.51	2.58	49.00	45.00	.00
*	.773	600.00	7.67	1381.52	.13	5.54	.00	63.07	57.52	2.79	49.00	45.00	49.00
*	.773	600.00	7.67	1382.56	.27	5.61	.01	67.69	29.72	3.69	49.00	45.00	.00
*	.893	370.00	11.89	1385.37	.15	3.42	.01	142.61	64.47	2.22	49.00	45.00	49.00
*	.893	370.00	11.89	1386.38	.42	3.78	.05	171.31	32.86	2.96	49.00	45.00	.00
*	1.016	450.00	10.44	1390.20	.14	4.54	.00	92.65	70.50	2.36	49.00	45.00	49.00
*	1.016	450.00	10.44	1391.24	.34	4.85	.01	97.39	36.03	3.20	49.00	45.00	.00
	1.094	450.00	10.00	1394.23	.05	4.02	.01	96.04	78.13	1.98	49.00	45.00	49.00
	1.094	450.00	10.00	1395.12	.13	3.86	.02	90.92	40.35	2.78	49.00	45.00	.00
*	1.177	450.00	14.44	1399.97	.24	8.09	.06	374.79	84.54	1.03	49.00	45.00	49.00
	1.177	450.00	14.44	1400.40	.17	5.27	.01	139.28	45.52	1.53	49.00	45.00	.00
*	1.285	590.00	11.36	1406.62	.04	6.64	.02	59.46	92.46	1.18	49.00	45.00	49.00
	1.285	590.00	11.36	1407.33	.20	6.92	.01	113.86	50.85	1.72	49.00	45.00	.00
*	1.375	620.00	10.16	1412.58	.13	5.93	.03	286.76	101.02	.76	49.00	45.00	49.00
	1.375	620.00	10.16	1413.74	.29	6.38	.03	119.31	55.52	1.75	49.00	45.00	49.00
*	1.495	690.00	9.13	1420.35	.08	7.76	.00	61.10	109.73	2.27	49.00	45.00	49.00
	1.495	690.00	9.13	1421.14	.32	7.39	.01	105.54	60.34	2.82	49.00	45.00	.00
*	1.601	600.00	9.83	1426.68	.24	5.55	.05	184.47	116.34	2.54	49.00	42.00	49.00
	1.601	600.00	9.83	1427.99	.61	6.76	.09	125.27	63.60	3.48	49.00	42.00	49.00
	1.668	390.00	17.18	1432.69	.14	6.00	.01	103.09	120.20	1.96	49.00	42.00	49.00
	1.668	390.00	17.18	1433.84	.59	5.85	.00	167.56	65.34	2.65	49.00	42.00	.00
*	1.730	320.00	11.25	1436.42	.27	3.31	.04	222.33	121.97	1.95	49.00	42.00	49.00
	1.730	320.00	11.25	1437.48	.37	3.62	.02	123.12	66.51	2.92	49.00	42.00	49.00

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	SECND	XLCH	K*CHSL	EG	HV	HL	OLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
*	1.808	410.00	13.41	1442.09	.18	5.66	.01	107.99	124.69	2.21	49.00	42.00	49.00
	1.808	410.00	13.41	1443.21	.62	5.65	.08	196.49	68.23	2.89	49.00	42.00	.00
*	1.860	275.00	15.27	1446.42	.41	3.39	.07	133.26	126.60	2.11	49.00	42.00	49.00
	1.860	275.00	15.27	1447.70	.87	4.42	.07	139.91	69.26	2.94	49.00	42.00	.00
	1.917	310.00	15.81	1450.81	.28	4.37	.01	179.93	128.26	1.73	49.00	42.00	49.00
	1.917	310.00	15.81	1452.01	.68	4.28	.02	172.25	70.28	2.53	49.00	42.00	49.00
	1.975	300.00	17.33	1455.93	.37	5.09	.03	149.97	130.09	1.55	49.00	42.00	49.00
	1.975	300.00	17.33	1456.58	.59	4.57	.01	142.93	71.46	1.99	.00	42.00	.00
	2.027	270.00	7.78	1459.45	.38	3.52	.00	133.48	131.38	2.96	49.00	42.00	49.00

	2.027	270.00	7.78	1460.46	.66	3.66	.02	153.38	72.52	3.70	.00	42.00	49.00
*	2.072	230.00	16.52	1463.18	.46	2.74	.02	119.75	132.48	2.83	49.00	42.00	49.00
	2.072	230.00	16.52	1464.24	1.09	3.65	.13	176.67	73.27	3.25	.00	42.00	.00
*	2.112	215.00	17.67	1466.77	.56	3.18	.03	198.19	133.42	2.51	49.00	42.00	49.00
	2.112	215.00	17.67	1467.24	.43	2.93	.07	112.15	74.01	3.10	.00	42.00	49.00
*	2.157	240.00	17.50	1471.43	.84	4.25	.08	164.05	134.24	2.68	49.00	42.00	49.00
*	2.157	240.00	17.50	1472.60	1.51	3.56	.32	226.21	74.75	3.19	.00	42.00	.00
*	2.172	80.00	33.75	1474.93	1.45	1.29	.30	158.14	134.45	2.88	.00	35.00	.00
*	2.172	80.00	33.75	1474.93	1.45	1.50	.02	158.26	74.92	2.88	.00	35.00	.00
*	2.204	169.00	4.14	1477.24	.67	2.31	.00	4.48	134.95	5.27	.00	12.00	.00
*	2.204	169.00	4.14	1477.24	.67	2.31	.00	4.47	75.43	5.27	.00	12.00	.00
*	2.216	38.00	18.42	1477.38	.30	.03	.11	15.78	135.14	5.08	.00	35.00	35.00
*	2.216	38.00	18.42	1477.38	.30	.03	.11	15.78	75.61	5.08	.00	35.00	35.00
*	-2.112	215.00	.00	1466.77	.56	.76	-.76	198.19	136.18	2.51	49.00	42.00	49.00
	-2.112	215.00	.00	1467.24	.43	.00	.00	112.10	76.70	3.10	.00	42.00	49.00
*	12.152	215.00	18.14	1470.63	.37	3.80	.06	111.69	136.60	2.65	.00	42.00	.00
*	12.152	215.00	18.14	1470.21	.87	2.44	.22	368.79	77.14	1.73	.00	42.00	.00
*	12.181	155.00	20.64	1475.46	1.47	.00	.00	125.34	136.67	3.18	.00	24.00	.00
*	12.181	155.00	20.64	1475.45	1.52	2.60	-2.60	130.10	77.20	3.14	.00	24.00	.00
*	12.189	40.00	82.50	1476.04	.07	.16	.42	20.08	136.74	1.87	16.00	35.00	49.00
*	12.189	40.00	82.50	1476.05	.09	.17	.43	21.37	77.26	1.86	16.00	35.00	49.00
*	12.197	43.00	6.75	1476.79	.38	.15	.09	73.43	136.82	2.01	16.00	35.00	.00
*	12.197	43.00	6.75	1476.79	.40	.16	.09	79.45	77.34	1.99	16.00	35.00	.00
	12.209	65.00	9.38	1477.29	.39	.51	.00	82.65	136.88	1.90	16.00	35.00	49.00
	12.209	65.00	9.38	1477.29	.37	.50	.00	75.16	77.40	1.92	16.00	35.00	49.00

	SECNO	XLCH	K*CHSL	EG	HV	HL	DLOSS	10*KS	VOL	DEPTH	K*XNL	K*XNCH	K*XNR
	-2.027	270.00	.00	1459.44	.38	.00	.00	132.21	137.64	2.96	49.00	42.00	49.00
	-2.027	270.00	.00	1460.46	.66	.00	.00	153.63	78.04	3.70	.00	42.00	49.00
*	22.080	200.00	19.00	1461.64	.08	2.16	.03	30.24	138.28	1.65	49.00	42.00	49.00
*	22.080	200.00	19.00	1462.23	.03	1.71	.06	7.53	78.64	2.30	49.00	42.00	49.00
*	22.097	90.00	22.22	1464.61	.91	.65	.41	341.47	138.35	1.80	.00	42.00	.00
*	22.097	90.00	22.22	1464.61	.91	.21	.44	341.74	78.74	1.80	.00	42.00	.00
*	22.129	169.00	18.34	1468.57	.27	3.97	.00	19.79	138.43	3.30	.00	24.00	.00
*	22.129	169.00	18.34	1468.57	.27	3.97	.00	19.79	78.83	3.30	.00	24.00	.00
*	22.140	55.00	90.91	1472.22	.40	.22	.06	113.31	138.47	1.82	16.00	35.00	.00
*	22.140	55.00	90.91	1472.22	.41	.23	.07	115.73	78.86	1.81	16.00	35.00	.00
	22.182	227.00	16.30	1474.70	.23	2.43	.05	101.62	138.64	.77	16.00	35.00	49.00
	22.182	227.00	16.30	1474.70	.23	2.43	.05	99.48	79.03	.77	16.00	35.00	49.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .474  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .623  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .623  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .773  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .773  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .893  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .893  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=      .893  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.016  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.016  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     1.016  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.177  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.177  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     1.285  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.375  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.495  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.601  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.601  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     1.730  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.730  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     1.808  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.860  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.860  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     2.072  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.072  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     2.112  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.112  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     2.157  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.157  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.157  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.157  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     2.172  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.172  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.172  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     2.172  PROFILE=  2  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     2.172  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     2.204  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.204  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.216  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=      2.216  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     -2.112  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     12.152  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     12.152  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.152  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     12.152  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     12.181  PROFILE=  1  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=     12.181  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     12.181  PROFILE=  1  HYDRAULIC JUMP D.S.
CAUTION SECNO=     12.181  PROFILE=  2  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=     12.181  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     12.189  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     12.189  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     12.197  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.197  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     12.197  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     12.197  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     12.197  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     12.197  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     22.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.080  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     22.097  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.097  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.097  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     22.097  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.097  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.097  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     22.129  PROFILE=  1  HYDRAULIC JUMP D.S.
WARNING SECNO=     22.129  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     22.129  PROFILE=  2  HYDRAULIC JUMP D.S.
WARNING SECNO=     22.129  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     22.140  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.140  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.140  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     22.140  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     22.140  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     22.140  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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FLOODWAY DATA, WASH NO 6 100 YEAR PROFI
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.114	332.	449.	3.2	1356.8	1355.8	1.0
.265	321.	442.	3.3	1364.1	1363.1	1.0
.362	316.	383.	3.8	1369.0	1368.1	.9
.474	534.	538.	2.7	1372.9	1371.9	1.0
.623	325.	347.	4.2	1376.5	1375.8	.7

.773	323.	409.	3.5	1382.3	1381.4	.9
.893	334.	329.	4.4	1385.9	1385.2	.7
1.016	278.	367.	3.9	1390.9	1390.1	.8
1.094	649.	509.	2.8	1395.0	1394.2	.8
1.177	643.	438.	3.3	1400.2	1399.7	.5
1.285	371.	409.	3.5	1407.1	1406.6	.5
1.375	249.	342.	4.2	1413.5	1412.5	1.0
1.495	220.	302.	4.2	1420.8	1420.3	.5
1.601	90.	179.	6.1	1427.3	1426.4	.9
1.668	126.	190.	5.8	1433.3	1432.6	.7
1.730	140.	228.	4.8	1437.1	1436.1	1.0
1.808	124.	183.	6.0	1442.6	1441.9	.7
1.860	60.	152.	7.2	1446.8	1446.0	.8
1.917	101.	177.	6.2	1451.3	1450.5	.8
1.975	97.	177.	6.2	1456.0	1455.6	.4
2.027	100.	181.	6.1	1459.8	1459.1	.7
2.072	46.	117.	8.4	1463.1	1462.7	.4
2.112	123.	190.	5.2	1466.8	1466.2	.6
2.157	30.	90.	9.9	1471.1	1470.6	.5
2.172	32.	92.	9.7	1473.5	1473.5	.0
2.204	32.	169.	6.6	1476.6	1476.6	.0
2.216	62.	259.	4.3	1477.1	1477.1	.0
-2.112	123.	190.	5.2	1466.8	1466.2	.6
12.152	7.	12.	7.5	1469.4	1470.3	-.9
12.181	7.	22.	9.9	1474.0	1474.0	.0
12.189	105.	110.	2.0	1476.0	1476.0	.0
12.197	59.	43.	5.1	1476.4	1476.4	.0
12.209	58.	46.	4.7	1476.9	1476.9	.0
-2.027	100.	180.	6.1	1459.8	1459.1	.7
22.080	45.	81.	1.4	1462.2	1461.6	.6
22.097	9.	15.	7.6	1463.7	1463.7	.0
22.129	9.	28.	4.2	1468.3	1468.3	.0
22.140	31.	25.	5.1	1471.8	1471.8	.0
22.182	83.	41.	3.1	1474.5	1474.5	.0

APPENDIX G - HEC-1 INPUT/OUTPUT
HARD COPY AND DISKETTE
SUN VALLEY PARKWAY NORTH
FLOOD INSURANCE STUDY
HYDROLOGY REPORT

Prepared for:

The Flood Control District
of Maricopa County

January 24, 1991
Revised March 6, 1991

Prepared by:

A-N WEST, INC.
7600 North 15th Street, Suite 200
Phoenix, AZ 85020

FCD Job No. 90-04
A-N West Job No. 7158-01

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File Names: SUNVP2.DAT - Watershed Only
WTM100Y2.DAT - Watershed Model (SUNVP2.DAT) Incorporated with Wittman ADMS Model to Trilby Wash/McMicken Dam Intersection

```
*************************************
*                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1) *
*           FEBRUARY 1981           *
*         REVISED 14 JUN 85         *
*                                   *
*      RUN DATE: 08/12/1991         *
*         TIME: 10:17:31.52         *
*                                   *
*************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
* THE HYDROLOGIC ENGINEERING CENTER *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*                                   *
* (916) 551-1748 OR (FTS) 448-3285  *
*                                   *
*************************************
```

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

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

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THE VERSION RELEASED 31JAN85 CONTAINS NEW OPTIONS ON RL AND BA RECORDS, AND ADDS THE HL RECORD. SEE JANUARY 1985 INPUT DESCRIPTION FOR NEW DEFINITIONS.

```
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::            900 ORDINATES            :::
:::            Version  3.2c            :::
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
```


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

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

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

  1           ID        SUN VALLEY PARKWAY NORTH FLOOD INSURANCE STUDY FOR FCDMC   (FILE:SUNVP2)
  2           ID        100-YEAR EXISTING CONDITION HYDROLOGY            BY A-N WEST,INC.,PHX.AZ
  3           ID        24-HOUR DURATION,TYPE II DISTRIBUTION  1/11/91 GAS REV.2\26\91&8\12\91
              *DIAGRAM
  4           IT       3  8NOV90    1200     640
  5           ID       5
  6           IN      15  8NOV90    1200
  7           JD    4.21    .001
  8           PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
  9           PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 10           PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 11           PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 12           PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 13           PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 14           PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 15           PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 16           PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 17           PC    .983    .986    .989    .992    .995    .998    1.00    1.00    1.00    1.00
 18           JD    4.17      10
 19           JD    4.00      50

 20           KK   SUB01
 21           KM        RUNOFF FROM SUBAREA01
 22           BA    .147
 23           LS       0    72.3
 24           UK     175     .02      .2     100
 25           RK    5500    .019     .05                     20      10

 26           KK    RO01
 27           KM        ROUTE SUB01 THROUGH STRUCT.#1
 28           RS       1    STOR       0
 29           SV       0     .01    .018     .16     .55
 30           SQ       0      55      85     150     200
 31           SE      71    72.5    73.0    74.0   74.75

 32           KK  RO01.1
 33           KM        ROUTE SUB01 TO CO04
 34           RL                      1.0    89.5
 35           RS      32    FLOW      -1
 36           RC     .05    .045     .05   12500     .01
 37           RY       0     100     230     239     247     252     258     278
 38           RY      91    90.6    90.1    89.4    88.9    90.3    90.3    90.9

 39           KK   SUB02
 40           KM        RUNOFF FROM SUBAREA02
 41           BA   1.199
 42           LS       0    75.9
 43           UK     225     .01     .13     100
 44           RK   12500    .010     .05                    200      10
```

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

  45          KK   SUB03
  46          KM        RUNOFF FROM SUBAREA03
  47          BA    .105
  48          LS      0    73.3
  49          UK    100    .016      .2     100
  50          RK   3000    .016     .05                     20      10

  51          KK    R003
  52          KM        ROUTE SUB03 THROUGH STRUC.#2
  53          RS      1    STOR       0
  54          SV      0   0.045    0.22    0.55    0.99    1.82
  55          SQ      0      27      87     118     150     183
  56          SE     69    70.0    71.0    72.0    72.9    74.2

  57          KK   SUB05
  58          KM        RUNOFF FROM SUBAREA 05
  59          BA    .191
  60          LS      0    72.6
  61          UK    200    .019     .20     100
  62          RK   8500    .019     .05                     45      10

  63          KK    R005
  64          KM        ROUTE SUB05 THROUGH STRUC.#3
  65          RS      1    STOR       0
  66          SV      0    .002    .015    .050    .138
  67          SQ      0      43     105     170     225
  68          SE   67.8      69      70      71      72

  69          KK    C005
  70          KM        COMBINE  R003 AND  R005
  71          HC      2

  72          KK  R005.1
  73          KM        ROUTE C005 TO C004
  74          RL                     1.0    88.7
  75          RS     14    FLOW      -1
  76          RC    .05    .045     .05   11000    .011
  77          RX     23      41    55.5      57    62.5    65.5      83      90
  78          RY   91.1    90.4    88.5    86.9    87.2    88.5      89    90.4

  79          KK   SUB04
  80          KM        RUNOFF FROM SUBAREA 04
  81          BA    .727
  82          LS      0    72.1
  83          UK    333    .011     .13     100
  84          RK  11000    .011     .05                    140      10

  85          KK    C004
  86          KM        COMBINE SUB04 AND R05.1
  87          HC      2
```

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

  88          KK  CD04.1
  89          KM       COMBINE SUB02, RD01.1 AND CD4.0
  90          HC      3

  91          KK   RD04
  92          KM       ROUTE CD04 TO CD06
  93          RL                   1.0     1.5
  94          RS      9   FLOW      -1
  95          RC    .05     .05     .05    4500   .0057
  96          RX      0       2     200     203     223     225     425     428
  97          RY      4       3     1.0       0       0     1.0       3       4

  98          KK   SUB06
  99          KM       RUNOFF FROM SUBAREA 06
 100          BA   .632
 101          LS      0    74.1
 102          UK    460    .011     .13     100
 103          RK   7200    .011     .05                     125      10

 104          KK   CD06
 105          KM       COMBINE SUBAREA 06 AND CD04
 106          HC      2

 107          KK   SUB07
 108          KM       RUNOFF FROM SUBAREA 07
 109          BA   .013
 110          LS      0    74.1
 111          UK    100     .02     .20     100
 112          RK   1500    .018     .05                       2       6

 113          KK   RD07
 114          KM       ROUTE SUB07 THROUGH STRUC. #4
 115          RS      1   STOR       0
 116          SV      0   .024    .076    .118
 117          SQ      0     24      66     106
 118          SE   64.8     66      67      68

 119          KK   SUB08
 120          KM       RUNOFF FROM SUBAREA 08
 121          BA   .020
 122          LS      0     81
 123          UK    175     .02     .20     100
 124          RK   1200    .018     .05                      15       6

 125          KK   DIV08
 126          KM       DIVERT (DIV08) FLOW THROUGH STRUC. #5,REMAINDER (DV081) TO STRUC. #6
 127          DT  DIV081
 128          DI      0      6      13      42    55.5
 129          DQ      0      0       0      24      37
```

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

 130          KK    CO08
 131          KM        COMBINE SUB 07 AND  DIV08
 132          HC       2

 133          KK   SUB09
 134          KM        RUNOFF FROM SUBAREA 09
 135          BA   1.250
 136          LS       0      83
 137          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 138          UI    76.4    76.4    76.4    76.4   187.6   242.1   304.8   376.5   451.9   489.7
 139          UI    535.    574.    610.    686.    799.    943.    773.    587.    528.    479.
 140          UI    454.    436.    410.    388.    369.    353.    326.    308.    294.    267.
 141          UI    247.    228.    202.    192.    187.    176.    174.    160.    157.    125.
 142          UI    125.    111.     98.     98.     95.     84.     84.     84.     75.     59.
 143          UI    58.5    58.5    58.5    58.5    40.9    37.4    37.4    37.4    37.4    37.4
 144          UI    37.4    37.4    32.8    14.6    14.6    14.6    14.6    14.6    14.6    14.6
 145          UI    14.6    14.6    14.6    14.6    14.6    14.6    14.6    14.6    14.6    14.6
 146          UI    14.6    14.6    14.6    14.6    12.2

 147          KK   DIV09
 148          KM        DIVERT (DIV09) FLOW TO STRUC.#6 AND #7, REMAINDER(DIV091) TO STRUC.11\12
 149          DT  DIV091
 150          DI       0      65     295     680    1397
 151          DQ       0      23     160     402     789

 152          KK  RODV09
 153          KM        ROUTE DIV09 TO SUN V.PARKWAY
 154          RS       6    FLOW      -1
 155          RC     .06     .05     .06    5000   .0167
 156          RX      73      81      89      94     113     123     189     196
 157          RY    96.5    95.1    94.9    93.9    93.8    94.8    95.0    96.5

 158          KK   SUB10
 159          KM        RUNOFF FROM SUBAREA 10
 160          BA    .182
 161          LS       0      78
 162          UK     325    .018     .20     100
 163          RK    5000    .018     .05                     50      10

 164          KK  DIV081
 165          KM        RETRIEVE DIV081
 166          DR  DIV081

 167          KK    CO10
 168          KM        COMBINE RODV09, SUB10 AND DIV081
 169          HC       3

 170          KK    RO10
 171          KM        ROUTE CO10 THROUGH STRUC. #6 AND #7
 172          RS       1    STOR       0
 173          SV       0    .041    .182    .447    .842
 174          SQ       0     270     674    1248    1800
 175          SE    58.4    59.4    60.4    61.4    62.4
```

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

 176          KK  CO10.1
 177          KM       COMBINE RO10 AND CO08
 178          HC      2

 179          KK   SUB11
 180          KM       RUNOFF FROM SUBAREA 11
 181          BA    .027
 182          LS      0      72
 183          UK    100    .015     .20     100
 184          RK   1000    .019     .05                      2       6

 185          KK    RO11
 186          KM       ROUTE SUB11 THROUGH STRUC. #9
 187          RS      1    STOR       0
 188          SV      0    .002    .014     .05    .082    .126    .165
 189          SQ      0       7      19      25    26.5    39.8      54
 190          SE   49.2    50.2    51.2    52.2    52.6    53.2    53.5

 191          KK   DIV11
 192          KM       DIVERT (DIV11) FLOW THROUGH STRUC. #9, REMAINDER (DV111) TO STRUC.12
 193          DT  DIV111
 194          DI      0       7      19      25    26.5    39.8      54
 195          DQ      0       0       0       0       0    10.8      24

 196          KK    CO11
 197          KM       COMBINE DIV11 AND CO10.1
 198          HC      2

 199          KK   SUB12
 200          KM       RUNOFF FROM SUBAREA 12
 201          BA    .022
 202          LS      0      81
 203          UK    275    .019     .20     100
 204          RK   3500    .019     .05                     15      10

 205          KK  DIV111
 206          KM       RETREIVE DIV 111
 207          DR  DIV111

 208          KK    CO12
 209          KM       COMBINE DIV111 AND SUB12
 210          HC      2

 211          KK    RO12
 212          KM       ROUTE CO12 THROUGH STRUC. #10
 213          RS      1    STOR       0
 214          SV      0    .004    .026    .097    .144    .180    .262
 215          SQ      0       7      19      24      37      55   107.5
 216          SE     45      46      47    47.6    48.3    48.7    49.4
```

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

 217          KK   DIV12
 218          KM        DIVERT (DIV12) FLOW THROUGH STRUC. #10, REMAINDER (DIV121) TO STRUC.#11
 219          DT  DIV121
 220          DI       0       7      19      24      37      55   107.5
 221          DQ       0       0       0       0      12    28.5    77.5

 222          KK  CO12.1
 223          KM        COMBINE DIV12 AND CO11
 224          HC       2

 225          KK  DIV091
 226          KM        RETREIVE DIV091
 227          DR  DIV091

 228          KK   SUB13
 229          KM        RUNOFF FROM SUBAREA 13
 230          BA    .423
 231          LS       0    80.4
 232          UK     200     .03     .25     100
 233          RK   10000     .03     .05                     40      10

 234          KK    CO13
 235          KM        COMBINE SUB13 AND DIV091
 236          HC       2

 237          KK    RO13
 238          KM        ROUTE CO13 TO CO14
 239          RS      10    FLOW      -1
 240          RC     .05    .045     .05    8000   .0175
 241          RX      40      75     110     120     150     160     475     680
 242          RY      80      77    76.7    75.7    75.7    76.7    76.9      80

 243          KK   SUB14
 244          KM        RUNOFF FROM SUBAREA 14
 245          BA    .503
 246          LS       0    78.3
 247          UK     333    .010     .13     100
 248          RK    6500    .010     .05                    120      10

 249          KK  DIV121
 250          KM        RETREIVE DIV121
 251          DR  DIV121

 252          KK    CO14
 253          KM        COMBINE SUB 14,DIV121 AND RO13
 254          HC       3

 255          KK    RO14
 256          KM        ROUTE CO14 THROUGH STRUC. #11
 257          RS       1    STOR       0
 258          SV       0    .027    .221    .831   1.876   3.149
 259          SQ       0     210     510     930    1410    2102
 260          SE      37      38      39      40      41      42
```

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

 261          KK   DIV14
 262          KM        DIVERT (DIV14) THROUGH STRUC.#11, REMAINDER (DIV141) TO STRUC.#12
 263          DT  DIV141
 264          DI       0     210     510     930    1410    2102
 265          DQ       0       0       0       0       0     302

 266          KK  CO14.1
 267          KM        COMBINE DIV14 AND CO12.1
 268          HC       2

 269          KK  DIV141
 270          KM        RETREIVE DIV141
 271          DR  DIV141

 272          KK  RO14.1
 273          KM        ROUTE DIV141 THROUGH STRUC. #12
 274          RS       1    STOR       0
 275          SV       0    .207    .666   1.237   1.966
 276          SQ       0     360     750    1140    1637
 277          SE    36.4      38      39      40      41

 278          KK  CO14.2
 279          KM        COMBINE RO14.1 AND CO14.1
 280          HC       2

 281          KK  RO14.2
 282          KM        ROUTE CO14.2 TO CO16
 283          RL                      1.0    99.7
 284          RS      10    FLOW      -1
 285          RC     .05    .045     .05    6500     .01
 286          RX       0      72      80     280     355     388     442     463
 287          RY   101.5    98.9   100.1   100.1    99.3    99.9    99.4   101.5

 288          KK   SUB15
 289          KM        RUNOFF FROM SUB15
 290          BA    .316
 291          LS       0    73.5
 292          UK     333    .010     .13     100
 293          RK    6500    .010     .05                     120      10

 294          KK   SUB16
 295          KM        RUNOFF FROM SUBAREA 16
 296          BA    .396
 297          LS       0      72
 298          UK     125    .012     .13     100
 299          RK    7500    .012     .05                      60      10

 300          KK    CO16
 301          KM        COMBINE SUB 15,SUB 16 AND RO14.2
 302          HC       3
```

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

 303          KK   RO16
 304          KM       ROUTE CO16 TO CO17
 305          RL                   1.0    99.7
 306          RS      6   FLOW      -1
 307          RC    .05   .045     .05    4000     .01
 308          RX      0      7      80     280     355     388     442     463
 309          RY  101.5   78.9   100.7    99.3    99.3    99.9    99.4   101.5

 310          KK  SUB17
 311          KM       RUNOFF FROM SUBAREA 17
 312          BA   .149
 313          LS      0   73.7
 314          UK    330   .010     .13     100
 315          RK   4000   .010     .05                     120      10

 316          KK   CO17
 317          KM       COMBINE SUB17 AND RO16
 318          HC      2

 319          KK  CO17.1
 320          KM       COMBINE CO06 AND CO17
 321          HC      2

 322          KK   RO17
 323          KM       ROUTE CO17 TO CO18
 324          RL                   1.0     1.5
 325          RS      9   FLOW      -1
 326          RC    .05    .05     .05    4500   .0057
 327          RX      0      2     200     203     223     225     425     428
 328          RY      4      3       1       0       0       1       3       4

 329          KK  SUB18
 330          KM       RUNOFF FROM SUBAREA 18
 331          BA   .656
 332          LS      0   72.5
 333          UK    180   .012     .13     100
 334          RK   8000   .012     .05                     150      10

 335          KK   CO18
 336          KM       COMBINE SUBAREA 18 AND RO17
 337          HC      2

 338          KK  SUB19
 339          KM       RUNOFF FROM SUBAREA 19
 340          BA   .191
 341          LS      0   72.1
 342          UK    450   .016     .20     100
 343          RK   6300   .016     .05                      40      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 344          KK    RO19
 345          KM        ROUTE SUB19 THROUGH STRUC. #13
 346          RS       1    STOR       0
 347          SV       0    .034     .42     1.2    2.15    3.23
 348          SQ       0     140     340     620     920    1397
 349          SE    31.0    32.0    33.0    34.0    35.0    36.0

 350          KK   SUB20
 351          KM        RUNOFF FROM SUBAREA 20
 352          BA    .812
 353          LS       0    77.4
 354          UK     250    .024     .20     100
 355          RK   12500    .024     .05                     160      10

 356          KK  DIV20A
 357          KM        DIVERT (DIV20A) FLOW TO STRUC. #14,REMAINDER TO STRUC. #15
 358          DT  DIV20B
 359          DI       0     156   462.4  1143.8
 360          DQ       0     102     268     599

 361          KK    RO20
 362          KM        ROUTE DIV20A THROUGH STRUC. #14
 363          RS       1    STOR       0
 364          SV       0     .14     .57     1.3     2.2    2.71
 365          SQ       0      40      97     165     378     539
 366          SE    27.8      29      30      31      32    32.5

 367          KK  DIV20C
 368          KM        DIVERT(DIV20C) FLOW THROUGH STRUC. #14, REMAINDER (DIV20D) TO STRUC.#15
 369          DT  DIV20D
 370          DI       0      40      97     165     378     539
 371          DQ       0       0       0       0     158     290

 372          KK  CO20.1
 373          KM        COMBINE DIV20B AND RO19
 374          HC       2

 375          KK  DIV20B
 376          KM        RETRIEVE DIV20B
 377          DR  DIV20B

 378          KK  DIV20D
 379          KM        RETRIEVE DIV20D
 380          DR  DIV20D

 381          KK    CO20
 382          KM        COMBINE DIV20B AND DIV20D
 383          HC       2     .01
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 384          KK  RO20.1
 385          KM        ROUTE CO20 THROUGH STRUC. #15
 386          RS       1    STOR       0
 387          SV       0    .029     .44    1.22    2.56
 388          SQ       0     100     288     492     760
 389          SE    24.2      25      26    26.8    27.8

 390          KK  CO20.2
 391          KM        COMBINE  CO20.1 AND RO20.1
 392          HC       2

 393          KK  RO20.2
 394          KM        ROUTE CO20.2 TO CO21
 395          RL                      1.0   92.75
 396          RS      15    FLOW      -1
 397          RC     .05    .045     .05   11000    .011
 398          RX       0      50      80      87     104     115     164     213
 399          RY    95.1    93.7    93.2    91.4    91.5    93.7    94.4    95.1

 400          KK   SUB21
 401          KM        RUNOFF FROM SUBAREA 21
 402          BA   1.128
 403          LS       0      72
 404          UK     400    .011     .13     100
 405          RK   10500    .011     .05                     150      10

 406          KK    CO21
 407          KM        COMBINE RO20.2 AND SUB21
 408          HC       2

 409          KK  CO21.1
 410          KM        COMBINE CO18 AND CO21
 411          HC       2

 412          KK   SUB22
 413          KM        RUNOFF FROM SUBAREA 22
 414          BA   1.136
 415          LS       0      72
 416          UK     420     .01     .13     100
 417          RK    9000     .01     .05                     260      10

 418          KK   SUB23
 419          KM        RUNOFF FROM SUBAREA 23
 420          BA    .287
 421          LS       0      72
 422          UK     180    .019     .25     100
 423          RK    7500    .019     .05                      45      10

 424          KK    RO23
 425          KM        ROUTE SUB23 THROUGH STRUC. #16
 426          RS       1    STOR       0
 427          SV       0    .039    .316    .621   1.032
 428          SQ       0      60     123     160     245
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429          SE    15.4      17      18    18.5      19
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

430          KK   DIV23
431          KM        DIVERT (DIV23) FLOW THROUGH STRUC. #16, REMAINDER (DIV231) TO STRUC.#17
432          DT  DIV231
433          DI       0      60     123     160     245
434          DQ       0       0       0       0      60

435          KK   SUB24
436          KM        RUNOFF FROM SUBAREA 24
437          BA   2.860
438          LS       0    81.8
439          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
440          UI    149.    149.    149.    149.    162.    428.    474.    574.    685.    852.
441          UI    915.    979.   1058.   1120.   1178.   1274.   1453.   1674.   1853.   1444.
442          UI   1148.   1042.    967.    901.    872.    839.    796.    759.    726.    698.
443          UI    661.    624.    598.    571.    524.    494.    463.    411.    394.    368.
444          UI    364.    346.    343.    321.    311.    289.    245.    245.    227.    190.
445          UI    190.    190.    178.    163.    163.    163.    163.    118.    114.    114.
446          UI    114.    114.    114.     95.     73.     73.     73.     73.     73.     73.
447          UI    72.9    72.9    72.9    58.1    28.5    28.5    28.5    28.5    28.5    28.5
448          UI    28.5    28.5    28.5    28.5    28.5    28.5    28.5    28.5    28.5    28.5
449          UI    28.5    28.5    28.5    28.5    28.5    28.5    28.5    28.5    28.5    14.7

450          KK  DIV231
451          KM        RETRIEVE DIV231
452          DR  DIV231

453          KK    CO24
454          KM        COMBINE DIV231 AND SUB24
455          HC       2

456          KK  DIV24A
457          KM        DIVERT (DIV24A) FLOW THROUGH STRUC.#17,REMAINDER(DIV24B) TO STRUC.#18\19
458          DT  DIV24B
459          DI       0     408     783    1717
460          DQ       0     330     347     950

461          KK   RO24A
462          KM        ROUTE DIV24A THROUGH STRUC. #17
463          RS       1    STOR       0
464          SV       0    .034    .242    .662   1.217   1.542    1.89
465          SQ       0     288     706    1224    1764    2052    2730
466          SE    12.8      14      15      16      17    17.5    18.5

467          KK  DIV24B
468          KM        RETRIEVE DIV24B
469          DR  DIV24B

470          KK  DIV24C
471          KM        DIVERT (DIV24C) FLOW THROUGH STRUC. #18,REMAINDER (DIV24D) TO STRUC. #19
472          DT  DIV24D
473          DI       0     330     501     950
474          DQ       0       0      17     134
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 475          KK   RO24C
 476          KM        ROUTE DIV24C THROUGH STRUC.#18
 477          RS       1    STOR       0
 478          SV       0     .15     .54    1.18    1.94    2.83
 479          SQ       0     418     864    1404    2016    2645
 480          SE    10.5      12      13      14      15      16

 481          KK  DIV24D
 482          KM        RETRIEVE DIV24D
 483          DR  DIV24D

 484          KK   RO24D
 485          KM        ROUTE DIV24D THROUGH STRUC. #19
 486          RS       1    STOR       0
 487          SV       0     .44     .96    1.61    2.35
 488          SQ       0     510     930    1380    1829
 489          SE       7       9      10      11      12

 490          KK  CO24.1
 491          KM        COMBINE DIV23, RO24A, RO24C AND RO24D
 492          HC       4    3.14

 493          KK  SUB25A
 494          KM         RUNOFF FROM SUBAREA 25A
 495          BA   .0378
 496          LS       0      72
 497          UK     200    .016      .2     100
 498          RK    2500    .016     .05                      8       5

 499          KK  CO25.1
 500          KM        COMBINE SUB25A AND CO24.1
 501          HC       2    3.18

 502          KK  SUB25B
 503          KM        RUNOFF FROM SUBAREA 25B
 504          BA    .098
 505          LS       0      72
 506          UK     200    .017      .2     100
 507          RK    5300    .017     .05                     16      10

 508          KK  CO25.2
 509          KM        COMBINE SUB25B AND CO25.1
 510          HC       2    3.28

 511          KK  SUB25C
 512          KM        RUNOFF FROM SUBAREA 25C
 513          BA    .180
 514          LS       0      72
 515          UK     230    .016      .2     100
 516          RK    8000    .016     .05                     40      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

517           KK   RO25C
518           KM        ROUTE TO STRUC. #24
519           RS       1    STOR       0
520           SV       0    .026    .060    .075    .111     .31
521           SQ       0    52.5      81      94     139     329
522           SE    91.3    93.2    94.1    94.4    94.9    95.8

523           KK  DV25C1
524           KM        DIVERT (DV25C1) FLOW TO STRUC.#24, REMAINDER TO STRUC. #25
525           DT  DV25C2
526           DI       0    52.5      81      94     139     329
527           DQ       0       0       0       4      40     329

528           KK  CO25.3
529           KM        COMBINE DV25C1 AND CO25.2
530           HC       2    3.46

531           KK  SUB25D
532           KM        RUNOFF FROM SUBAREA 25D
533           BA    .652
534           LS       0    75.4
535           UK     250   .0256     .25     100
536           RK   12500   .0256     .05                      80      10

537           KK  DV25C2
538           KM        RETRIEVE  DV25C2
539           DR  DV25C2

540           KK   CO25D
541           KM        COMBINE DV25C2 AND SUB25D
542           HC       2

543           KK   RO25D
544           KM        ROUTE SUB25D THROUGH STRUC. #25
545           RS       1    STOR       0
546           SV       0    .286    .694    .946   1.578
547           SQ       0     144     293     380     540
548           SE    80.4      82      83    83.5    84.5

549           KK  DV25D1
550           KM        DIVERT DV25D1 FLOW TO STRUC. #25 REMAINDR TO STRUC.#26
551           DT  DV25D2
552           DI       0     144     293     380     540
553           DQ       0       0       0       0      24

554           KK  CO25.4
555           KM        COMBINE DV25D1 AND CO25.3
556           HC       2    4.11
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 557          KK   SUB28
 558          KM        RUNOFF FROM SUBAREA 28 FOR ROUTING THROUGH STRUC. #26
 559          BA    .089
 560          LS       0      72
 561          UK     150   .0167     .20     100
 562          RK    6500   .0167     .05                       8      10

 563          KK  DV25D2
 564          KM        RETRIEVE DV25D2
 565          DR  DV25D2

 566          KK    CO28
 567          KM        COMBINE DV25D2 AND SUB28
 568          HC       2

 569          KK  CO28.1
 570          KM        COMBINE       CO28 AND CO25.4
 571          HC       2

 572          KK    RO28
 573          KM        ROUTE CO28 TO CO28.1
 574          RL                     1.0    93.5
 575          RS       8    FLOW      -1
 576          RC     .05    .045     .05    7000    .011
 577          RX      10      13     153     157     166     172     394     398
 578          RY    96.5    94.9    94.3    91.5    91.9    94.3    94.5    96.5

 579          KK   SUB26
 580          KM        RUNOFF FROM SUBAREA 26
 581          BA    .574
 582          LS       0      72
 583          UK     260    .011     .15     100
 584          RK    7000    .011     .05                     250      10

 585          KK  CO28.2
 586          KM        COMBINE SUB26 AND RO28
 587          HC       2    4.78

 588          KK  RO28.1
 589          KM        ROUTE CO28.1 TO CO27
 590          RL                     1.0    93.5
 591          RS       8    FLOW      -1
 592          RC     .05    .045     .05    7000    .011
 593          RX      10      13     153     157     166     172     394     398
 594          RY    96.5    94.9    94.3    91.5    91.9    94.3    94.5    96.5

 595          KK   SUB27
 596          KM        RUNOFF FROM SUB27
 597          BA    .318
 598          LS       0      72
 599          UK     200    .010     .13     100
 600          RK    7000    .010     .05                     200      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 601          KK    CO27
 602          KM        COMBINE   SUB27     AND RO28.1
 603          HC       2

 604          KK  CO27.1
 605          KM        COMBINE SUB22 AND CO27
 606          HC       2

 607          KK   SUB36
 608          KM        RUNOFF FROM SUBAREA 36
 609          BA    .369
 610          LS       0      72
 611          UK     250    .011     .13     100
 612          RK    9000    .011     .05                      60      10

 613          KK    CO36
 614          KM        COMBINE SUB36 AND CO27.1
 615          HC       2

 616          KK   SUB29
 617          KM        FUNOFF FROM SUBAREA 29
 618          BA    .178
 619          LS       0      72
 620          UK     160    .015     .20     100
 621          RK    6000    .015     .05                      30      10

 622          KK   SUB30
 623          KM        RUNOFF FROM SUBAREA 30
 624          BA   2.722
 625          LS       0      82
 626          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 627          UI    169.    169.    169.    169.    434.    549.    687.    854.   1005.   1099.
 628          UI   1199.   1278.   1364.   1568.   1827.   2081.   1570.   1255.   1130.   1042.
 629          UI    990.    946.    892.    840.    800.    755.    704.    669.    629.    576.
 630          UI    525.    468.    441.    413.    402.    388.    366.    353.    304.    277.
 631          UI    270.    216.    216.    216.    189.    185.    185.    182.    129.    129.
 632          UI    129.    129.    129.    100.     83.     83.     83.     83.     83.     83.
 633          UI    82.6    76.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3
 634          UI    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3
 635          UI    32.3    32.3    32.3    18.9

 636          KK    CO30
 637          KM        COMBINE SUB29 AND SUB30
 638          HC       2

 639          KK  DIV30A
 640          KM        DIVERT (DIV30A) FLOW TO DETENTION (RO30), REMAINDER TO STRUC. #27
 641          DT  DIV30B
 642          DI       0      10     100    1000    3000
 643          DQ       0       5      50     500    1500
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 644          KK    RO30
 645          KM        ROUTE DIV30A THROUGH DETENTION BASIN IN ROUTE TO STRUC.#27
 646          RS       1    STOR       0
 647          SV       0    .125    .525    1.14    1.87    2.72    3.71    4.26
 648          SQ       0       3     5.2     6.7     205     567    1034    1302
 649          SE      39      40      41      42      43      44      45    45.5

 650          KK  DIV30B
 651          KM        RETRIEVE DIV30B
 652          DR  DIV30B

 653          KK  CO30.1
 654          KM        COMBINE DIV30B AND RO30
 655          HC       2

 656          KK  RO30.1
 657          KM        ROUTE CO30.1 THROUGH STRUC. #27
 658          RS       1    STOR       0
 659          SV       0     .56     1.4    2.58    3.62    4.52
 660          SQ       0     612    1116    1656    2160    2664
 661          SE      29      31      32      33      34      35

 662          KK   SUB31
 663          KM        RUNOFF FROM SUBAREA 31
 664          BA    .340
 665          LS       0    78.8
 666          UK     300    .025     .20     100
 667          RK    8500    .025     .05                     30      10

 668          KK   SUB32
 669          KM        RUNOFF FROM SUBAREA 32
 670          BA    .480
 671          LS       0    82.2
 672          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 673          UI    50.4    50.4   101.7   179.9   262.8   322.1   370.8   420.1   538.2   542.7
 674          UI    364.    312.    287.    261.    239.    214.    196.    168.    144.    127.
 675          UI    119.    110.     98.     83.     67.     64.     56.     55.     44.     39.
 676          UI    38.6    31.9    24.7    24.7    24.7    24.7    17.8     9.7     9.7     9.7
 677          UI     9.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7     3.5

 678          KK    CO32
 679          KM        COMBINE SUB31 AND SUB 32
 680          HC       2

 681          KK    RO32
 682          KM        ROUTE CO32 THROUGH STRUC. #28
 683          RS       1    STOR       0
 684          SV       0     .62    1.59    3.02    4.71    6.47    8.39
 685          SQ       0     576     972    1512    2160    2880    3600
 686          SE    19.3      21      22      23      24      25      26
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 687          KK  SUB32A
 688          KM       RUNOFF FROM SUBAREA 32A TO STRUC. #29
 689          BA   .033
 690          LS      0      72
 691          UK    250    .014      .2     100
 692          RK   1900    .014     .05                      6      10

 693          KK   RO32A
 694          KM       ROUTE TO STRUC. #29
 695          RS      1    STOR      -1
 696          SV      0     .14     .26     .49
 697          SQ      0      14      72     182
 698          SE   22.4    23.9    24.4    24.9

 699          KK  DV32A1
 700          KM       DIVERT DV32A1 TO STRUC.#29, REMAINDER TO STRUC.#30
 701          DT  DV32A2
 702          DI      0      14      72     182
 703          DQ      0       0    50.4   152.5

 704          KK  CO32.1
 705          KM       COMBINE RO30.1, RO32 AND DV32A1
 706          HC      3

 707          KK  RO32.1
 708          KM       ROUTE CO32.1 TO CO34
 709          RL                   1.0    94.3
 710          RS      3    FLOW      -1
 711          RC    .05    .045     .05    3000    .008
 712          RX      0      21      33      38      44     111     117     212
 713          RY   97.0    92.2    93.1    92.6    93.1   93.55    93.1    97.0

 714          KK   SUB33
 715          KM       RUNOFF FROM SUBAREA 33
 716          BA   .105
 717          LS      0      72
 718          UK    200     .01     .15     100
 719          RK   3000    .008     .05                    250      10

 720          KK   SUB34
 721          KM       RUNOFF FROM SUBAREA 34
 722          BA   .198
 723          LS      0      72
 724          UK    350   .0129     .13     100
 725          RK   4500   .0129     .05                     25      10

 726          KK    CO34
 727          KM       COMBINE SUB34, SUB33 AND RO32.1
 728          HC      3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 729          KK    RO34
 730          KM        ROUTE CO34 TO CO35
 731          RL                     1.0    94.3
 732          RS       3    FLOW      -1
 733          RC     .05    .045     .05    3100    .008
 734          RX       0      21      33      38      44     111     117     212
 735          RY    97.0    92.2    93.1    92.6    93.1   93.55    93.1    97.0

 736          KK   SUB35
 737          KM        RUNOFF FROM SUBAREA 35
 738          BA    .093
 739          LS       0      72
 740          UK     200     .01     .15     100
 741          RK    3100    .008     .05                     250      10

 742          KK    CO35
 743          KM        COMBINE SUB35 AND RO34
 744          HC       2

 745          KK  CO35.1
 746          KM        COMBINE  CO35 AND CO36
 747          HC       2

 748          KK   SUB38
 749          KM        RUNOFF FROM SUBAREA 38
 750          BA    .556
 751          LS       0      72
 752          UK     300    .011     .13     100
 753          RK    7000    .011     .05                     120      10

 754          KK   SUB39
 755          KM        RUNOFF FROM SUBAREA 39
 756          BA    .707
 757          LS       0    79.3
 758          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 759          UI    90.3    90.3   280.0   430.2   575.1   678.9   824.3  1048.1   674.3   557.7
 760          UI    501.    447.    397.    352.    296.    246.    218.    201.    174.    143.
 761          UI    115.    106.     99.     78.     69.     67.     44.     44.     44.     44.
 762          UI    18.5    17.3    17.3    17.3    17.3    17.3    17.3    17.3    17.3    17.3
 763          UI    10.1

 764          KK  DV32A2
 765          KM        RETRIEVE  DV32A2
 766          DR  DV32A2

 767          KK    CO39
 768          KM        COMBINE DV32A2 AND SUB39
 769          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 770          KK    RO39
 771          KM        ROUTE  CO39 THROUGH STRUC. #30
 772          RS       1    STOR       0
 773          SV       0    .018    .085    .241    .865    1.32    1.86
 774          SQ       0      72     204     312     533     693     947
 775          SE      97      98      99    99.7   100.7   101.2   101.7

 776          KK   DIV39
 777          KM        DIVERT (DIV39) FLOW THROUGH STRUC. #30, REMAINDER TO STRUC. #31
 778          DT  DIV391
 779          DI       0      72     204     312     533     693     947
 780          DQ       0       0       0       0      65     165     357

 781          KK  RO39.1
 782          KM        ROUTE DIV39 TO CO40
 783          RL                      1.0    92.2
 784          RS      10    FLOW      -1
 785          RC     .05    .045     .05    6000   .0092
 786          RX       0      20      75      87      97      99     150     165
 787          RY    94.5    93.6    93.6    90.9    91.9    92.9    92.8    94.5

 788          KK   SUB40
 789          KM        RUNOFF FROM SUBAREA 40
 790          BA    .285
 791          LS       0      72
 792          UK     250     .01     .13     100
 793          RK    6000   .0092     .05                     80      10

 794          KK    CO40
 795          KM        COMBINE SUB40,      AND RO39.1
 796          HC       2

 797          KK  DIV391
 798          KM        RETRIEVE DIV391
 799          DR  DIV391

 800          KK   SUB41
 801          KM        RUNOFF FROM SUBAREA 41
 802          BA   1.156
 803          LS       0    83.7
 804          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 805          UI    95.2    95.2    95.2   250.3   344.9   466.1   575.8   645.2   712.4   785.0
 806          UI    946.   1152.    863.    677.    597.    558.    519.    483.    449.    415.
 807          UI    381.    351.    313.    276.    247.    233.    219.    206.    193.    156.
 808          UI    149.    122.    122.    108.    104.    104.     76.     73.     73.     73.
 809          UI    51.1    46.6    46.6    46.6    46.6    46.6    34.4    18.3    18.3    18.3
 810          UI    18.3    18.3    18.3    18.3    18.3    18.3    18.3    18.3    18.3    18.3
 811          UI    18.3    18.3    16.6
```

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

 812          KK    CO41
 813          KM        COMBINE DIV391 AND SUB41
 814          HC       2

 815          KK   DIV41
 816          KM        DIVERT (DIV41) FLOW THROUGH STRUC. #31, REMAINDER TO STRUC. #32
 817          DT  DIV411
 818          DI       0     200     448     740    1316    1981
 819          DQ       0       0       0       0     276     781

 820          KK    RO41
 821          KM        ROUTE DIV41 THROUGH STRUC. #31
 822          RS       1    STOR       0
 823          SV       0     .25     .75    1.56    2.60    3.81
 824          SQ       0     200     448     740    1316    1981
 825          SE    86.6      88      89      90      91      92

 826          KK  DIV411
 827          KM        RETRIEVE DIV411
 828          DR  DIV411

 829          KK   SUB42
 830          KM        RUNOFF FROM SUBAREA 42
 831          BA    .418
 832          LS       0    81.8
 833          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 834          UI    50.6    50.6   139.6   223.0   310.3   365.7   424.3   568.1   469.9   338.4
 835          UI    298.    267.    242.    213.    190.    163.    132.    122.    112.     97.
 836          UI    81.8    64.7    60.9    55.5    47.7    38.8    38.8    29.1    24.8    24.8
 837          UI    24.8    19.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7
 838          UI     9.7     9.7     7.5

 839          KK  DIV42A
 840          KM        DIVERT(DIV42A) FLOW TO STRUC. #32,REMAINDER TO STRUC. #33 AND #34
 841          DT  DIV42B
 842          DI       0      12      42      72      95     338     684
 843          DQ       0       0       0       0       0     125     312

 844          KK  CO42.1
 845          KM        COMBINE DIV411 AND DIV42A
 846          HC       2

 847          KK  RO41.1
 848          KM        ROUTE CO42.1 THROUGH STRUC. #32
 849          RS       1    STOR       0
 850          SV       0     .37     .89    1.69    2.93
 851          SQ       0     612    1116    1728    2376
 852          SE      79      81      82      83      84
```

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

 853          KK  DIV42B
 854          KM       RETRIEVE DIV42B
 855          DR  DIV42B

 856          KK  DIV42C
 857          KM       DIVERT(DIV42C)FLOW TO STRUC.#33, REMAINDER TO STRUC.#34
 858          DT  DIV42D
 859          DI      0      12      42      72      95     213     372
 860          DQ      0       0       0       0      20     117     270

 861          KK   RO42
 862          KM       ROUTE DIV42C THROUGH STRUC. #33
 863          RS      1    STOR       0
 864          SV      0    .018    .168    .563   1.107    2.24    3.21
 865          SQ      0      12      42      72      95     338     684
 866          SE   80.3    81.2    82.2    83.2      84    85.1    85.7

 867          KK   CO42
 868          KM       COMBINE RO41,RO41.1 AND  RO42
 869          HC      3   1.574

 870          KK   RO42
 871          KM       ROUTE CO42 TO CO43
 872          RL                     1.0    93.7
 873          RS      6    FLOW      -1
 874          RC    .05    .045     .05    4500    .009
 875          RX      0      30      95     101     111     144     155     185
 876          RY   96.5    94.2    94.3    91.9    93.2    94.0    93.0    96.5

 877          KK   SUB43
 878          KM       RUNOFF FROM SUBAREA 43
 879          BA   .158
 880          LS      0      72
 881          UK    200     .01     .13     100
 882          RK   4500    .009     .05                     120      10

 883          KK   CO43
 884          KM       COMBINE SUB43,     AND RO42
 885          HC      2

 886          KK  DIV42D
 887          KM       RETRIEVE 42D
 888          DR  DIV42D

 889          KK   SUB44
 890          KM       RUNOFF FROM SUB44
 891          BA   .096
 892          LS      0    72.8
 893          UK    170    .017     .20     100
 894          RK   3500    .017     .05                      18      10
```

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

 895          KK    CO44
 896          KM        COMBINE DIV42D AND SUB44
 897          HC       2

 898          KK    RO44
 899          KM        ROUTE SUB44 TO CO45
 900          RL                      1.0     1.0
 901          RS       5    FLOW      -1
 902          RC     .05    .045     .05    4500     .01
 903          RX       0       2     100     103     118     121     220     222
 904          RY       3       2     1.5       0       0     1.5       2       3

 905          KK   SUB45
 906          KM        RUNOFF FROM SUBAREA 45
 907          BA    .218
 908          LS       0      72
 909          UK     375     .01     .13     100
 910          RK    4500     .01     .05                     60      10

 911          KK    CO45
 912          KM        COMBINE SUBAREA 45,     AND RO44
 913          HC       2

 914          KK  CO45.1
 915          KM        COMBINE CO45, CO43, CO40, AND SUB38
 916          HC       4

 917          KK   SUB47
 918          KM        RUNOFF FROM SUBAREA 47
 919          BA    .305
 920          LS       0      72
 921          UK     300     .01     .13     100
 922          RK    4500     .01     .05                     40      10

 923          KK   SUB46
 924          KM        RUNOFF FROM SUBAREA 46
 925          BA   1.094
 926          LS       0    79.6
 927          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 928          UI    130.    130.    342.    556.    788.    926.   1061.   1390.   1323.    900.
 929          UI    777.    706.    633.    567.    508.    430.    362.    322.    298.    272.
 930          UI    214.    181.    166.    143.    142.    100.    100.     93.     64.     64.
 931          UI    63.7    63.7    34.7    24.9    24.9    24.9    24.9    24.9    24.9    24.9
 932          UI    24.9    24.9    24.9    14.2

 933          KK    RO46
 934          KM        ROUTE SUB46 TO CO49
 935          RL                      1.0   94.75
 936          RS       7    FLOW      -1
 937          RC     .05    .045     .05    5400    .011
 938          RX       0     128     179     182     198     289     307     310
 939          RY    97.0    95.7    95.2    93.5    94.9    94.4    96.5    97.0
```

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

 940          KK   SUB48
 941          KM        RUNOFF FROM SUBAREA 48
 942          BA   .205
 943          LS      0    73.0
 944          UK    110     .03     .20     100
 945          RK   3000     .03     .05                     40      10

 946          KK   RO48
 947          KM        ROUTE SUB46 TO CO49
 948          RL                     1.0   91.95
 949          RS      4    FLOW      -1
 950          RC    .05    .045     .05    5000    .011
 951          RX      0      25      43      46      56      63      88     102
 952          RY   94.9    91.6    91.7    90.0    90.0    91.6      93    94.9

 953          KK   SUB49
 954          KM        RUNOFF FROM SUBAREA 49
 955          BA   .556
 956          LS      0      72
 957          UK    150    .011     .20     100
 958          RK   4500    .011     .05                    100      10

 959          KK   CO49
 960          KM        COMBINE RO46, RO48 AND SUB49
 961          HC      3

 962          KK   SUB50
 963          KM        RUNOFF FROM SUBAREA 50
 964          BA   .102
 965          LS      0      81
 966          UK    175    .026     .20     100
 967          RK   4500    .026     .05                     20      10

 968          KK   RO50
 969          KM        ROUTE SUB50 TO CO51
 970          RL                     1.0     2.5
 971          RS      5    FLOW      -1
 972          RC    .05    .045     .05    4500    .016
 973          RX      0       2     100     110     120     130     220     222
 974          RY      6     5.5       5       0       0       5     5.5       6

 975          KK   SUB51
 976          KM        RUNOFF FROM SUBAREA 51
 977          BA   .218
 978          LS      0      72
 979          UK    150    .016     .15     100
 980          RK   4500    .016     .05                     50      10

 981          KK   CO51
 982          KM        COMBINE SUB51 AND RO50
 983          HC      2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 984          KK  C051.1
 985          KM       COMBINE SUB47, C049 AND C051
 986          HC      3

 987          KK   SUB52
 988          KM       RUNOFF FROM SUBAREA 52
 989          BA   1.212
 990          LS      0    85.6
 991          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
 992          UI    98.7    98.7    98.7   253.1   353.2   471.8   592.5   662.5   734.3   801.7
 993          UI    957.   1188.    947.    716.    631.    583.    548.    506.    473.    438.
 994          UI    404.    374.    332.    299.    261.    242.    231.    220.    206.    171.
 995          UI    162.    130.    126.    119.    108.    108.     91.     76.     76.     76.
 996          UI    65.2    48.3    48.3    48.3    48.3    48.3    48.3    21.4    18.9    18.9
 997          UI    18.9    18.9    18.9    18.9    18.9    18.9    18.9    18.9    18.9    18.9
 998          UI    18.9    18.9    18.9    11.5

 999          KK    R052
1000          KM       ROUTE SUB52 THROUGH STRUC.#50,REMAINDER TO #51, 52 AND 53
1001          RS      1    STOR       0
1002          SV      0    .028    .128     .31     .61     1.0     1.3     1.4
1003          SQ      0     198     390     570     769    1084    1377    1430
1004          SE   71.3      73      74      75      76      77    77.6      78

1005          KK  DIV52A
1006          KM       DIVERT(DIV52A)FLOW TO STRUC. #50,REMAINDER TO #51,52 AND53
1007          DT  DIV52B
1008          DI      0     198     390     570     769    1084    1377
1009          DQ      0       0       0       0      34     199     417

1010          KK  DIV52B
1011          KM       RETRIEVE DIV52B
1012          DR  DIV52B

1013          KK  R052.1
1014          KM       ROUTE DIV52B  THROUGH STRUC.#51,REMAINDER TO #52 AND 53
1015          RS      1    STOR       0
1016          SV      0    .024    .113     .20     .25     .34     .44     .56
1017          SQ      0      19      50      70      90     195     383     637
1018          SE   70.8      72      73    73.7      74    74.5      75    75.5

1019          KK  DIV52C
1020          KM       TAKE R052.1 FLOW, DIVERT DIV52C TO STRUC.#51, REMAINDER TO STRUC.#52,53
1021          DT  DIV52D
1022          DI      0      19      50      70      90     195     383     637
1023          DQ      0       0       0       0      14     105     285     535

1024          KK  DIV52D
1025          KM       RETRIEVE DIV52D
1026          DR  DIV52D
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1027          KK  R052.2
1028          KM        ROUTE DIV52D THROUGH STRUC.#52, REMAINDER TO #53
1029          RS      1    STOR      0
1030          SV      0    .018    .071    .161    .261    .437    .649     .82    1.17
1031          SQ      0      15      52      90     116     179     346   545.5     994
1032          SE     65      66      67      68    68.8    69.9    70.8    71.4    72.4

1033          KK  DIV52E
1034          KM        TAKE R052.2 FLOW,DIVERT DIV52E TO STRUC.52, REMAINDER TO STRUC.#53
1035          DT  DIV52F
1036          DI      0      15      52      90     116     179     346   545.5     994
1037          DQ      0       0       0       0       0      39     196     383     824

1038          KK  DIV52F
1039          KM        RETRIEVE DIV52F
1040          DR  DIV52F

1041          KK  R052.3
1042          KM        ROUTE TO  STRUC.#53
1043          RS      1    STOR     -1
1044          SV      0     .20     .69    1.37    1.47     2.1     2.3
1045          SQ      0      46      90     107     110     141     483
1046          SE   55.8    58.8    61.3    63.1    63.3    64.4    66.1

1047          KK  DIV52G
1048          KM        DIVERT DIV52G FLOW TO STRUC.#53,REMAINDETO STRUC.54
1049          DT  DIV52H
1050          DI      0      46      90     107     110     141     483
1051          DQ      0       0       0       0       0      21     353

1052          KK    C052
1053          KM        COMBINE DIV52A, DIV52C, DIV52E AND DIV52G
1054          HC      4   1.212

1055          KK    R052
1056          KM        ROUTE  C052 TO C053
1057          RL                     1.0    94.9
1058          RS      5    FLOW     -1
1059          RC    .05    .045     .05    4500    .016
1060          RX      0       2      16      22      33      42     103     132
1061          RY   97.0    95.0    94.7    93.8    93.9    95.2    94.7    97.0

1062          KK   SUB54
1063          KM        RUNOFF FROM SUBAREA 54
1064          BA   .514
1065          LS      0      72
1066          UK    160    .016     .20     100
1067          RK   4500    .016     .05                     120      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1068          KK    CO53
1069          KM        COMBINE RO52 AND SUB54
1070          HC       2

1071          KK   SUB53
1072          KM        RUNOFF FROM SUBAREA 53
1073          BA    .156
1074          LS       0    82.5
1075          UK     125     .05     .25     100
1076          RK    3000     .05     .05                     15       6

1077          KK  DIV52H
1078          KM        RETRIEVE DIV52H
1079          DR  DIV52H

1080          KK    CO53
1081          KM        COMBINE DIV52H AND SUB53
1082          HC       2

1083          KK  DIV53A
1084          KM        DIVERT (DIV53A) FLOW TO STRUC.#54,REMAINDER TO STRUC. #55
1085          DT  DIV53B
1086          DI       0     105     200     240     369     458
1087          DQ       0       0       0       0      89     171

1088          KK    RO53
1089          KM        ROUTE SUB53 TO CO56
1090          RL                      1.0    90.9
1091          RS       3    FLOW      -1
1092          RC     .05    .045     .05    4500    .016
1093          RX       0      18      21      42      68      73      85     110
1094          RY    94.8    93.6    93.1    89.5    89.1    87.9    88.1    93.1

1095          KK  DIV53B
1096          KM        RETRIEVE DIV53B
1097          DR  DIV53B

1098          KK   SUB55
1099          KM        RUNOFF FROM SUBAREA 55
1100          BA    .064
1101          LS       0      81
1102          UK     100    .025     .25     100
1103          RK    1800    .025     .05                     18       6

1104          KK    CO55
1105          KM        COMBINE DIV53B AND SUB55
1106          HC       2

1107          KK    RO55
1108          KM        ROUTE CO55 TO CO56
1109          RL                      1.0    90.9
1110          RS       3    FLOW      -1
1111          RC     .05    .045    .045    4500    .016
```

```
1112        RX      0     18     21     42     68     73     85    110
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1113        RY   94.8   93.6   93.1   89.5   89.1   87.9   88.1   93.1

1114        KK   SUB56
1115        KM        RUNOFF FROM SUBAREA 56
1116        BA   .198
1117        LS      0     72
1118        UK    160  .0167    .20    100
1119        RK   3000  .0167    .05                  60     10

1120        KK   CO56
1121        KM        COMBINE RO53, RO55 AND SUB56
1122        HC      3

1123        KK  CO56.1
1124        KM        COMBINE CO56 AND CO53
1125        HC      2

1126        KK   SUB57
1127        KM        RUNOFF FROM SUBAREA 57
1128        BA   .396
1129        LS      0   83.7
1130        KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
1131        UI   41.5   41.5   83.1  147.3  215.4  264.5  304.4  343.9  440.2  450.9
1132        UI   302.   258.   237.   215.   197.   177.   162.   139.   120.   105.
1133        UI   98.2   91.3   81.4   68.1   56.3   53.0   46.5   45.4   37.2   31.8
1134        UI   31.8   27.3   20.3   20.3   20.3   20.3   15.9    7.9    7.9    7.9
1135        UI    7.9    7.9    7.9    7.9    7.9    7.9    7.9    7.9    7.9    4.0
1136        ZZ
```

```
                SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  20        SUB01
               V
               V
  26         R001
               V
               V
  32       R001.1
               .
               .
  39           .       SUB02
               .          .
               .          .
  45           .          .       SUB03
               .          .          V
               .          .          V
  51           .          .       R003
               .          .          .
               .          .          .
  57           .          .          .      SUB05
               .          .          .          V
               .          .          .          V
  63           .          .          .       R005
               .          .          .          .
               .          .          .          .
  69           .          .       C005............
               .          .          V
               .          .          V
  72           .          .      R005.1
               .          .          .
               .          .          .
  79           .          .          .      SUB04
               .          .          .          .
               .          .          .          .
  85           .          .       C004............
               .          .          .
               .          .          .
  88       C004.1......................
               V
               V
  91         R004
               .
               .
  98           .       SUB06
               .          .
               .          .
 104         C006............
               .
               .
 107           .       SUB07
               .          V
               .          V
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113          .        RO07
             .          .
             .          .
119          .          .      SUB08
             .          .          .
             .          .          .
127          .          .          .-------> DIV081
125          .          .      DIV08
             .          .          .
             .          .          .
130          .        CO08............
             .          .
             .          .
133          .          .      SUB09
             .          .          .
             .          .          .
149          .          .          .-------> DIV091
147          .          .      DIV09
             .          .          V
             .          .          V
152          .          .     RODV09
             .          .          .
             .          .          .
158          .          .          .      SUB10
             .          .          .          .
             .          .          .          .
166          .          .          .          .          .<------- DIV081
164          .          .          .          .     DIV081
             .          .          .          .          .
             .          .          .          .          .
167          .          .       CO10........................
             .          .          V
             .          .          V
170          .          .       RO10
             .          .          .
             .          .          .
176          .     CO10.1............
             .          .
             .          .
179          .          .      SUB11
             .          .          V
             .          .          V
185          .          .       RO11
             .          .          .
             .          .          .
193          .          .          .-------> DIV111
191          .          .      DIV11
             .          .          .
             .          .          .
196          .        CO11............
             .          .
             .          .
199          .          .      SUB12
             .          .          .
             .          .          .
207          .          .          .          .<------- DIV111
205          .          .          .     DIV111
             .          .          .          .
             .          .          .          .
208          .          .       CO12............
             .          .          V
             .          .          V
211          .          .      RO12
             .          .          .
             .          .          .
219          .          .          .-------> DIV121
```

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217          .          .      DIV12
             .          .          .
             .          .          .
222          .     CO12.1...........
             .          .
             .          .
227          .          .          .<-------  DIV091
225          .          .     DIV091
             .          .          .
             .          .          .
228          .          .          .      SUB13
             .          .          .          .
             .          .          .          .
234          .          .       CO13...........
             .          .          V
             .          .          V
237          .          .       RO13
             .          .          .
             .          .          .
243          .          .          .      SUB14
             .          .          .          .
             .          .          .          .
251          .          .          .          .          .<-------  DIV121
249          .          .          .          .     DIV121
             .          .          .          .          .
             .          .          .          .          .
252          .          .       CO14......................
             .          .          V
             .          .          V
255          .          .       RO14
             .          .          .
             .          .          .
263          .          .          .-------> DIV141
261          .          .     DIV14
             .          .          .
             .          .          .
266          .     CO14.1...........
             .          .
             .          .
271          .          .          .<-------  DIV141
269          .          .     DIV141
             .          .          V
             .          .          V
272          .          .     RO14.1
             .          .          .
             .          .          .
278          .     CO14.2...........
             .          V
             .          V
281          .     RO14.2
             .          .
             .          .
288          .          .     SUB15
             .          .          .
             .          .          .
294          .          .          .      SUB16
             .          .          .          .
             .          .          .          .
300          .       CO16......................
             .          V
             .          V
303          .       RO16
             .          .
             .          .
310          .          .     SUB17
```

```
316          .       CO17............
             .          .
             .          .
319     CO17.1............
             V
             V
322       RO17
             .
             .
329          .      SUB18
             .          .
             .          .
335       CO18............
             .
             .
338          .      SUB19
             .          V
             .          V
344          .       RO19
             .          .
             .          .
350          .          .      SUB20
             .          .          .
             .          .          .
358          .          .          .-------> DIV20B
356          .          .     DIV20A
             .          .          V
             .          .          V
361          .          .       RO20
             .          .          .
             .          .          .
369          .          .          .-------> DIV20D
367          .          .     DIV20C
             .          .          .
             .          .          .
372          .     CO20.1............
             .          .
             .          .
377          .          .          .<-------  DIV20B
375          .          .     DIV20B
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380          .          .          .          .<-------  DIV20D
378          .          .          .     DIV20D
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381          .          .       CO20............
             .          .          V
             .          .          V
384          .          .     RO20.1
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390          .     CO20.2............
             .          V
             .          V
393          .     RO20.2
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400          .          .      SUB21
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406          .       CO21............
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409     CO21.1
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412          SUB22
418                SUB23
                     V
                     V
424                RO23
432                     .-------> DIV231
430                DIV23
435                          SUB24
452                                     .<------- DIV231
450                                DIV231
453                           CO24............
458                                     .-------> DIV24B
456                          DIV24A
                                V
                                V
461                          RO24A
469                                     .<------- DIV24B
467                                DIV24B
472                                     .-------> DIV24D
470                                DIV24C
                                     V
                                     V
475                                RO24C
483                                                .<------- DIV24D
481                                           DIV24D
                                                   V
                                                   V
484                                           RO24D
490                CO24.1.................................
493                          SUB25A
499                CO25.1............
502                          SUB25B
508                CO25.2............
511                          SUB25C
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                 .          .          .          V
                 .          .          .          V
517              .          .          .       RO25C
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                 .          .          .          .
525              .          .          .          .-------> DV25C2
523              .          .          .      DV25C1
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528              .          .      CO25.3............
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531              .          .          .      SUB25D
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539              .          .          .          .          .<------- DV25C2
537              .          .          .          .     DV25C2
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540              .          .          .       CO25D............
                 .          .          .          V
                 .          .          .          V
543              .          .          .       RO25D
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551              .          .          .          .-------> DV25D2
549              .          .          .      DV25D1
                 .          .          .          .
                 .          .          .          .
554              .          .      CO25.4............
                 .          .          .
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557              .          .          .       SUB28
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565              .          .          .          .          .<------- DV25D2
563              .          .          .          .     DV25D2
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566              .          .          .       CO28............
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569              .          .      CO28.1............
                 .          .          V
                 .          .          V
572              .          .       RO28
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579              .          .          .      SUB26
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585              .          .      CO28.2............
                 .          .          V
                 .          .          V
588              .          .      RO28.1
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595              .          .          .      SUB27
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601              .          .       CO27............
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604              .      CO27.1............
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607          .          .      SUB36
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613          .       CO36...........
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616          .          .      SUB29
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622          .          .          .      SUB30
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636          .          .      CO30...........
             .          .          .
             .          .          .
641          .          .          .-------> DIV30B
639          .          .     DIV30A
             .          .          V
             .          .          V
644          .          .      RO30
             .          .          .
             .          .          .
652          .          .          .          .<------- DIV30B
650          .          .          .     DIV30B
             .          .          .          .
             .          .          .          .
653          .          .     CO30.1..........
             .          .          V
             .          .          V
656          .          .     RO30.1
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662          .          .          .      SUB31
             .          .          .          .
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668          .          .          .          .      SUB32
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678          .          .          .       CO32...........
             .          .          .          V
             .          .          .          V
681          .          .          .       RO32
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687          .          .          .          .     SUB32A
             .          .          .          .          V
             .          .          .          .          V
693          .          .          .          .      RO32A
             .          .          .          .          .
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701          .          .          .          .          .-------> DV32A2
699          .          .          .          .     DV32A1
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704          .          .     CO32.1......................
             .          .          V
             .          .          V
707          .          .     RO32.1
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714          .          .          .      SUB33
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720          .          .          .          .      SUB34
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726          .          .       CO34.......................
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729          .          .       RO34
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736          .          .          .      SUB35
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742          .          .       CO35............
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745          .     CO35.1............
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748          .          .      SUB38
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754          .          .          .      SUB39
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766          .          .          .          .          .<-------  DV32A2
764          .          .          .          .     DV32A2
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767          .          .          .       CO39............
             .          .          .          V
             .          .          .          V
770          .          .          .       RO39
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778          .          .          .          .------->  DIV391
776          .          .          .      DIV39
             .          .          .          V
             .          .          .          V
781          .          .          .     RO39.1
             .          .          .          .
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788          .          .          .          .      SUB40
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794          .          .          .       CO40............
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799          .          .          .          .          .<-------  DIV391
797          .          .          .          .     DIV391
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800          .          .          .          .          .      SUB41
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812          .          .          .          .       CO41............
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817          .          .          .          .          .------->  DIV411
815          .          .          .          .      DIV41
             .          .          .          .          V
             .          .          .          .          V
820          .          .          .          .       RO41
             .          .          .          .          .
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828          .          .          .          .          .          .<-------  DIV411
826          .          .          .          .          .     DIV411
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829                                                                      SUB42
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841                                                  .-------> DIV42B
839                                            DIV42A
844                                       CO42.1............
                                             V
                                             V
847                                       RO41.1
855                                                  .<------- DIV42B
853                                            DIV42B
858                                                  .-------> DIV42D
856                                            DIV42C
                                                V
                                                V
861                                             RO42
867                                  CO42........................
                                        V
                                        V
870                                  RO42
877                                     SUB43
883                                  CO43............
888                                                  .<------- DIV42D
886                                       DIV42D
889                                            SUB44
895                                        CO44............
                                             V
                                             V
898                                        RO44
905                                            SUB45
911                                        CO45............
914                          CO45.1.................................
917                                 SUB47
923                                    SUB46
                                        V
                                        V
933                                    RO46
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940   .   .   .   .   .   SUB48
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      .   .   .   .   .      V
946   .   .   .   .   .   RO48
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953   .   .   .   .   .      .      SUB49
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959   .   .   .   .   CO49.......................
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962   .   .   .   .   .   SUB50
      .   .   .   .   .      V
      .   .   .   .   .      V
968   .   .   .   .   .   RO50
      .   .   .   .   .      .
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975   .   .   .   .   .      .      SUB51
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981   .   .   .   .   .   CO51............
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984   .   .   .   CO51.1......................
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987   .   .   .   .   SUB52
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999   .   .   .   .   RO52
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      .   .   .   .      .
1007  .   .   .   .      .-------> DIV52B
1005  .   .   .   .   DIV52A
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1012  .   .   .   .      .      .<------- DIV52B
1010  .   .   .   .      .   DIV52B
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      .   .   .   .      .      V
1013  .   .   .   .      .   RO52.1
      .   .   .   .      .      .
      .   .   .   .      .      .
1021  .   .   .   .      .      .-------> DIV52D
1019  .   .   .   .      .   DIV52C
      .   .   .   .      .      .
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1026  .   .   .   .      .      .      .<------- DIV52D
1024  .   .   .   .      .      .   DIV52D
      .   .   .   .      .      .      V
      .   .   .   .      .      .      V
1027  .   .   .   .      .      .   RO52.2
      .   .   .   .      .      .      .
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1035  .   .   .   .      .      .      .-------> DIV52F
1033  .   .   .   .      .      .   DIV52E
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1040  .   .   .   .      .      .      .      .<------- DIV52F
1038  .   .   .   .      .      .      .   DIV52F
      .   .   .   .      .      .      .      V
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1041  .   .   .   .      .      .      .   RO52.3
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1049                                                                  .-------> DIV52H
1047                                                            DIV52G
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1052                                  CO52.................................
                                        V
                                        V
1055                                  RO52
                                        .
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1062                                    .      SUB54
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1068                                  CO53............
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1071                                    .      SUB53
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1079                                    .        .          .<-------  DIV52H
1077                                    .        .     DIV52H
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1080                                    .      CO53............
                                        .        .
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1085                                    .        .-------> DIV53B
1083                                    .     DIV53A
                                        .        V
                                        .        V
1088                                    .      RO53
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1097                                    .        .          .<-------  DIV53B
1095                                    .        .     DIV53B
                                        .        .          .
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1098                                    .        .          .      SUB55
                                        .        .          .        .
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1104                                    .        .       CO55............
                                        .        .          V
                                        .        .          V
1107                                    .        .       RO55
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1114                                    .        .          .      SUB56
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1120                                    .      CO56.......................
                                        .        .
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1123                                  CO56.1............
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                                        .
1126                                    .      SUB57
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
************************************
*                                  *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*           FEBRUARY 1981          *
*         REVISED 14 JUN 85        *
*                                  *
*      RUN DATE: 08/12/1991        *
*         TIME: 10:21:07.82        *
*                                  *
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************************************
*                                  *
*   U.S. ARMY CORPS OF ENGINEERS   *
* THE HYDROLOGIC ENGINEERING CENTER *
*         609 SECOND STREET        *
*      DAVIS, CALIFORNIA 95616     *
*                                  *
* (916) 551-1748 OR (FTS) 448-3285 *
*                                  *
************************************
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                    SUN VALLEY PARKWAY NORTH FLOOD INSURANCE STUDY FOR FCDMC   (FILE:SUNVP2)
                    100-YEAR EXISTING CONDITION HYDROLOGY          BY A-N WEST,INC.,PHX.AZ
                    24-HOUR DURATION,TYPE II DISTRIBUTION  1/11/91 GAS REV.2\26\91&8\12\91

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          3  MINUTES IN COMPUTATION INTERVAL
                  IDATE      8NOV90  STARTING DATE
                  ITIME       1200  STARTING TIME
                     NQ        640  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      9NOV90  ENDING DATE
                 NDTIME       1957  ENDING TIME

             COMPUTATION INTERVAL    0.05 HOURS
                  TOTAL TIME BASE   31.95 HOURS

       ENGLISH UNITS
           DRAINAGE AREA         SQUARE MILES
           PRECIPITATION DEPTH   INCHES
           LENGTH, ELEVATION     FEET
           FLOW                  CUBIC FEET PER SECOND
           STORAGE VOLUME        ACRE-FEET
           SURFACE AREA          ACRES
           TEMPERATURE           DEGREES FAHRENHEIT

 7 JD        INDEX STORM NO. 1
                  STRM       4.21  PRECIPITATION DEPTH
                  TRDA       0.00  TRANSPOSITION DRAINAGE AREA

 8 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

18 JD INDEX STORM NO. 2

STRM 4.17 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

19 JD INDEX STORM NO. 3

STRM 4.00 PRECIPITATION DEPTH

TRDA 50.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 85.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 27.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 225.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 2844. TO 3370.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 106.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1800.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 19.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 107.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 6298. TO 13176.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2102.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1637.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 345. TO 15343.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 2844. TO 3370.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.

THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 340.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 100.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 60.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2730.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2645.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1829.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 329.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 144.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 1034. TO 1302.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2664.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 576.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 312.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1981.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2376.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 12.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 430. TO 912.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO     1430.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      637.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      994.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN      141. TO      483.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN     4597. TO     5250.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SUB01	102.	12.25	20.	6.	5.	0.15		
ROUTED TO	R001	102.	12.30	20.	6.	5.	0.15	73.05	12.30
ROUTED TO	R001.1	58.	14.10	13.	5.	3.	0.15	90.28	14.05
HYDROGRAPH AT	SUB02	505.	12.65	178.	58.	44.	1.20		
HYDROGRAPH AT	SUB03	113.	12.15	15.	5.	3.	0.10		
ROUTED TO	R003	102.	12.20	15.	5.	3.	0.10	71.20	12.20
HYDROGRAPH AT	SUB05	94.	12.45	25.	8.	6.	0.19		
ROUTED TO	R005	94.	12.45	25.	8.	6.	0.19	69.63	12.50
2 COMBINED AT	C005	175.	12.30	40.	13.	10.	0.30		
ROUTED TO	R005.1	125.	13.05	34.	11.	9.	0.30	89.21	13.10
HYDROGRAPH AT	SUB04	242.	12.75	90.	30.	23.	0.73		
2 COMBINED AT	C004	349.	12.95	123.	42.	31.	1.02		
3 COMBINED AT	C004.1	803.	12.85	313.	105.	79.	2.37		
ROUTED TO	R004	752.	13.25	276.	96.	72.	2.37	2.51	13.35
HYDROGRAPH AT	SUB06	321.	12.55	89.	29.	22.	0.63		
2 COMBINED AT	C006	912.	13.15	358.	124.	93.	3.00		
HYDROGRAPH AT	SUB07	17.	12.05	2.	1.	0.	0.01		
ROUTED TO	R007	17.	12.10	2.	1.	0.	0.01	65.57	12.10
HYDROGRAPH AT	SUB08	35.	12.10	4.	1.	1.	0.02		
DIVERSION TO	DIV081	18.	12.10	1.	0.	0.	0.02		
HYDROGRAPH AT	DIV08	17.	12.10	3.	1.	1.	0.02		
2 COMBINED AT	C008	34.	12.10	5.	2.	1.	0.03		
HYDROGRAPH AT	SUB09	871.	12.65	263.	82.	62.	1.25		
DIVERSION TO	DIV091	505.	12.65	143.	41.	31.	1.25		
HYDROGRAPH AT	DIV09	366.	12.65	120.	41.	30.	1.25		

ROUTED TO	RODV09	341.	12.90	120.	41.	30.	1.25	93.40	12.75
HYDROGRAPH AT	SUB10	158.	12.30	31.	10.	7.	0.18		
HYDROGRAPH AT	DIV081	18.	12.10	1.	0.	0.	0.02		
3 COMBINED AT	CO10	401.	12.90	152.	50.	38.	1.43		
ROUTED TO	RO10	401.	12.90	152.	50.	38.	1.43	59.65	12.90
2 COMBINED AT	CO10.1	407.	12.90	156.	52.	39.	1.47		
HYDROGRAPH AT	SUB11	35.	12.05	4.	1.	1.	0.03		
ROUTED TO	RO11	30.	12.15	4.	1.	1.	0.03	52.45	12.15
DIVERSION TO	DIV111	3.	12.15	0.	0.	0.	0.03		
HYDROGRAPH AT	DIV11	27.	12.15	4.	1.	1.	0.03		
2 COMBINED AT	CO11	411.	12.90	160.	53.	40.	1.49		
HYDROGRAPH AT	SUB12	24.	12.25	4.	1.	1.	0.02		
HYDROGRAPH AT	DIV111	3.	12.15	0.	0.	0.	0.03		
2 COMBINED AT	CO12	24.	12.25	4.	1.	1.	0.02		
ROUTED TO	RO12	22.	12.35	4.	1.	1.	0.02	47.17	12.35
DIVERSION TO	DIV121	0.	0.05	0.	0.	0.	0.02		
HYDROGRAPH AT	DIV12	22.	12.35	4.	1.	1.	0.02		
2 COMBINED AT	CO12.1	419.	12.90	164.	54.	41.	1.51		
HYDROGRAPH AT	DIV091	505.	12.65	143.	41.	31.	1.25		
HYDROGRAPH AT	SUB13	425.	12.25	79.	25.	18.	0.42		
2 COMBINED AT	CO13	777.	12.35	222.	66.	50.	0.42		
ROUTED TO	RO13	707.	13.10	221.	66.	50.	0.42	77.21	13.10
HYDROGRAPH AT	SUB14	372.	12.40	86.	27.	20.	0.50		
HYDROGRAPH AT	DIV121	0.	0.05	0.	0.	0.	0.02		
3 COMBINED AT	CO14	859.	13.05	306.	93.	70.	0.93		
ROUTED TO	RO14	859.	13.05	306.	93.	70.	0.93	39.68	13.10
DIVERSION TO	DIV141	0.	0.05	0.	0.	0.	0.93		
HYDROGRAPH AT	DIV14	859.	13.05	306.	93.	70.	0.93		
2 COMBINED AT	CO14.1	1250.	13.00	469.	147.	111.	2.44		
HYDROGRAPH AT	DIV141	0.	0.05	0.	0.	0.	0.93		
ROUTED TO	RO14.1	0.	0.05	0.	0.	0.	0.93	36.40	0.00
2 COMBINED AT	CO14.2	1250.	13.00	469.	147.	111.	2.44		
ROUTED TO	RO14.2	1146.	13.40	421.	120.	90.	2.44	100.74	13.45

HYDROGRAPH AT	SUB15	148.	12.55	43.	14.	11.	0.32		
HYDROGRAPH AT	SUB16	224.	12.30	52.	16.	12.	0.40		
3 COMBINED AT	CO16	1273.	13.40	507.	150.	113.	3.15		
ROUTED TO	RO16	1267.	13.50	506.	150.	113.	3.15	88.28	13.55
HYDROGRAPH AT	SUB17	84.	12.45	21.	7.	5.	0.15		
2 COMBINED AT	CO17	1293.	13.50	526.	157.	118.	3.30		
2 COMBINED AT	CO17.1	2124.	13.45	883.	280.	211.	6.30		
ROUTED TO	RO17	2066.	13.70	846.	260.	195.	6.30	3.36	13.75
HYDROGRAPH AT	SUB18	322.	12.40	86.	28.	21.	0.66		
2 COMBINED AT	CO18	2157.	13.65	909.	288.	216.	6.96		
HYDROGRAPH AT	SUB19	86.	12.60	24.	8.	6.	0.19		
ROUTED TO	RO19	86.	12.60	24.	8.	6.	0.19	31.53	12.65
HYDROGRAPH AT	SUB20	456.	12.45	131.	42.	32.	0.81		
DIVERSION TO	DIV20B	264.	12.45	81.	26.	20.	0.81		
HYDROGRAPH AT	DIV20A	191.	12.45	50.	16.	12.	0.81		
ROUTED TO	RO20	187.	12.55	50.	16.	12.	0.81	30.96	12.60
DIVERSION TO	DIV20D	17.	12.55	1.	0.	0.	0.81		
HYDROGRAPH AT	DIV20C	171.	12.55	49.	16.	12.	0.81		
2 COMBINED AT	CO20.1	256.	12.60	74.	24.	18.	1.00		
HYDROGRAPH AT	DIV20B	264.	12.45	81.	26.	20.	0.81		
HYDROGRAPH AT	DIV20D	17.	12.55	1.	0.	0.	0.81		
2 COMBINED AT	CO20	283.	12.50	82.	27.	20.	0.01		
ROUTED TO	RO20.1	282.	12.55	82.	27.	20.	0.01	25.75	12.50
2 COMBINED AT	CO20.2	532.	12.55	155.	50.	38.	1.01		
ROUTED TO	RO20.2	469.	13.25	140.	47.	35.	1.01	93.99	13.25
HYDROGRAPH AT	SUB21	415.	12.70	141.	47.	35.	1.13		
2 COMBINED AT	CO21	766.	13.10	276.	93.	70.	2.14		
2 COMBINED AT	CO21.1	2731.	13.55	1183.	381.	286.	9.10		
HYDROGRAPH AT	SUB22	402.	12.75	140.	47.	35.	1.14		
HYDROGRAPH AT	SUB23	158.	12.40	37.	12.	9.	0.29		
ROUTED TO	RO23	151.	12.50	37.	12.	9.	0.29	18.13	12.50
DIVERSION TO	DIV231	0.	0.05	0.	0.	0.	0.29		
HYDROGRAPH AT	DIV23	151.	12.50	37.	12.	9.	0.29		

HYDROGRAPH AT	SUB24	1714.	12.80	575.	180.	135.	2.86		
HYDROGRAPH AT	DIV231	0.	0.05	0.	0.	0.	0.29		
2 COMBINED AT	CO24	1714.	12.80	575.	180.	135.	2.86		
DIVERSION TO	DIV24B	948.	12.80	341.	114.	86.	2.86		
HYDROGRAPH AT	DIV24A	766.	12.80	233.	65.	49.	2.86		
ROUTED TO	RO24A	767.	12.80	233.	65.	49.	2.86	15.04	12.80
HYDROGRAPH AT	DIV24B	948.	12.80	341.	114.	86.	2.86		
DIVERSION TO	DIV24D	134.	12.80	15.	4.	3.	2.86		
HYDROGRAPH AT	DIV24C	815.	12.80	326.	111.	83.	2.86		
ROUTED TO	RO24C	816.	12.80	326.	111.	83.	2.86	12.77	12.80
HYDROGRAPH AT	DIV24D	134.	12.80	15.	4.	3.	2.86		
ROUTED TO	RO24D	134.	12.80	15.	4.	3.	2.86	7.45	12.80
4 COMBINED AT	CO24.1	1825.	12.75	611.	191.	144.	3.14		
HYDROGRAPH AT	SUB25A	32.	12.20	5.	2.	1.	0.04		
2 COMBINED AT	CO25.1	1834.	12.75	616.	193.	145.	3.18		
HYDROGRAPH AT	SUB25B	62.	12.35	13.	4.	3.	0.10		
2 COMBINED AT	CO25.2	1866.	12.75	629.	197.	148.	3.28		
HYDROGRAPH AT	SUB25C	82.	12.55	23.	8.	6.	0.18		
ROUTED TO	RO25C	82.	12.55	23.	8.	6.	0.18	93.78	12.60
DIVERSION TO	DV25C2	0.	12.55	0.	0.	0.	0.18		
HYDROGRAPH AT	DV25C1	82.	12.55	23.	8.	6.	0.18		
2 COMBINED AT	CO25.3	1939.	12.75	652.	205.	154.	3.46		
HYDROGRAPH AT	SUB25D	352.	12.50	97.	31.	24.	0.65		
HYDROGRAPH AT	DV25C2	0.	12.55	0.	0.	0.	0.18		
2 COMBINED AT	CO25D	352.	12.50	97.	31.	24.	0.65		
ROUTED TO	RO25D	350.	12.50	97.	31.	24.	0.65	83.11	12.55
DIVERSION TO	DV25D2	0.	0.05	0.	0.	0.	0.65		
HYDROGRAPH AT	DV25D1	350.	12.50	97.	31.	24.	0.65		
2 COMBINED AT	CO25.4	2240.	12.75	748.	236.	177.	4.11		
HYDROGRAPH AT	SUB28	54.	12.35	12.	4.	3.	0.09		
HYDROGRAPH AT	DV25D2	0.	0.05	0.	0.	0.	0.65		
2 COMBINED AT	CO28	54.	12.35	12.	4.	3.	0.09		
2 COMBINED AT	CO28.1	2270.	12.75	759.	239.	180.	4.20		

ROUTED TO	RO28	2151.	13.05	736.	227.	170.	4.20	95.68	13.05
HYDROGRAPH AT	SUB26	228.	12.60	72.	24.	18.	0.57		
2 COMBINED AT	CO28.2	2322.	13.00	806.	251.	188.	4.78		
ROUTED TO	RO28.1	2204.	13.35	778.	240.	180.	4.78	95.69	13.40
HYDROGRAPH AT	SUB27	113.	12.65	40.	13.	10.	0.32		
2 COMBINED AT	CO27	2275.	13.35	808.	253.	190.	5.10		
2 COMBINED AT	CO27.1	2543.	13.35	944.	300.	225.	6.23		
HYDROGRAPH AT	SUB36	154.	12.55	47.	15.	12.	0.37		
2 COMBINED AT	CO36	2622.	13.30	989.	315.	237.	6.60		
HYDROGRAPH AT	SUB29	108.	12.35	23.	7.	6.	0.18		
HYDROGRAPH AT	SUB30	1841.	12.65	553.	172.	129.	2.72		
2 COMBINED AT	CO30	1911.	12.65	576.	180.	135.	2.90		
DIVERSION TO	DIV30B	956.	12.65	288.	90.	67.	2.90		
HYDROGRAPH AT	DIV30A	956.	12.65	288.	90.	67.	2.90		
ROUTED TO	RO30	955.	12.65	288.	90.	67.	2.90	44.70	12.65
HYDROGRAPH AT	DIV30B	956.	12.65	288.	90.	67.	2.90		
2 COMBINED AT	CO30.1	1911.	12.65	576.	180.	135.	2.90		
ROUTED TO	RO30.1	1905.	12.65	576.	180.	135.	2.90	33.25	12.65
HYDROGRAPH AT	SUB31	300.	12.30	60.	19.	14.	0.34		
HYDROGRAPH AT	SUB32	455.	12.30	99.	31.	23.	0.48		
2 COMBINED AT	CO32	754.	12.30	158.	49.	37.	0.82		
ROUTED TO	RO32	748.	12.35	158.	49.	37.	0.82	21.29	12.35
HYDROGRAPH AT	SUB32A	25.	12.25	4.	1.	1.	0.03		
ROUTED TO	RO32A	25.	12.25	4.	1.	1.	0.03	23.96	12.30
DIVERSION TO	DV32A2	10.	12.25	0.	0.	0.	0.03		
HYDROGRAPH AT	DV32A1	15.	12.25	4.	1.	1.	0.03		
3 COMBINED AT	CO32.1	2397.	12.65	737.	230.	173.	3.75		
ROUTED TO	RO32.1	2360.	12.70	717.	225.	169.	3.75	96.14	12.70
HYDROGRAPH AT	SUB33	51.	12.50	13.	4.	3.	0.10		
HYDROGRAPH AT	SUB34	129.	12.30	26.	8.	6.	0.20		
3 COMBINED AT	CO34	2472.	12.70	756.	238.	178.	4.06		
ROUTED TO	RO34	2435.	12.80	731.	232.	174.	4.06	96.19	12.80
HYDROGRAPH AT	SUB35	42.	12.55	12.	4.	3.	0.09		

2 COMBINED AT	C035	2469.	12.80	743.	233.	177.	4.15		
2 COMBINED AT	C035.1	4274.	13.25	1723.	548.	412.	10.75		
HYDROGRAPH AT	SUB38	265.	12.45	71.	23.	17.	0.56		
HYDROGRAPH AT	SUB39	675.	12.25	132.	41.	30.	0.71		
HYDROGRAPH AT	DV32A2	10.	12.25	0.	0.	0.	0.03		
2 COMBINED AT	C039	684.	12.25	132.	41.	31.	0.71		
ROUTED TO	R039	676.	12.30	132.	41.	31.	0.71	100.99	12.30
DIVERSION TO	DIV391	154.	12.30	9.	2.	2.	0.71		
HYDROGRAPH AT	DIV39	522.	12.30	123.	38.	29.	0.71		
ROUTED TO	R039.1	473.	12.70	113.	36.	27.	0.71	93.95	12.70
HYDROGRAPH AT	SUB40	140.	12.45	37.	12.	9.	0.28		
2 COMBINED AT	C040	589.	12.70	150.	47.	36.	0.99		
HYDROGRAPH AT	DIV391	154.	12.30	9.	2.	2.	0.71		
HYDROGRAPH AT	SUB41	996.	12.45	250.	78.	58.	1.16		
2 COMBINED AT	C041	1094.	12.40	259.	80.	60.	1.16		
DIVERSION TO	DIV411	170.	12.40	9.	2.	2.	1.16		
HYDROGRAPH AT	DIV41	924.	12.40	249.	78.	58.	1.16		
ROUTED TO	R041	925.	12.40	249.	78.	58.	1.16	90.24	12.40
HYDROGRAPH AT	DIV411	170.	12.40	9.	2.	2.	1.16		
HYDROGRAPH AT	SUB42	426.	12.25	85.	26.	20.	0.42		
DIVERSION TO	DIV42B	173.	12.25	18.	4.	3.	0.42		
HYDROGRAPH AT	DIV42A	253.	12.25	67.	22.	16.	0.42		
2 COMBINED AT	C042.1	413.	12.35	77.	24.	18.	0.42		
ROUTED TO	R041.1	412.	12.35	77.	24.	18.	0.42	80.16	12.35
HYDROGRAPH AT	DIV42B	173.	12.25	18.	4.	3.	0.42		
DIVERSION TO	DIV42D	84.	12.25	5.	1.	1.	0.42		
HYDROGRAPH AT	DIV42C	89.	12.25	13.	3.	2.	0.42		
ROUTED TO	R042	79.	12.45	13.	3.	2.	0.42	83.39	12.45
3 COMBINED AT	C042	1401.	12.40	339.	105.	79.	1.57		
ROUTED TO	R042	1338.	12.60	323.	97.	73.	1.57	95.71	12.60
HYDROGRAPH AT	SUB43	78.	12.45	20.	7.	5.	0.16		
2 COMBINED AT	C043	1408.	12.60	343.	104.	78.	1.73		
HYDROGRAPH AT	DIV42D	84.	12.25	5.	1.	1.	0.42		

HYDROGRAPH AT	SUB44	82.	12.20	13.	4.	3.	0.10		
2 COMBINED AT	CO44	163.	12.25	18.	5.	4.	0.10		
ROUTED TO	RO44	117.	12.60	17.	5.	4.	0.10	1.53	12.55
HYDROGRAPH AT	SUB45	120.	12.45	28.	9.	7.	0.22		
2 COMBINED AT	CO45	230.	12.50	45.	14.	11.	0.31		
4 COMBINED AT	CO45.1	2440.	12.60	606.	188.	141.	3.59		
HYDROGRAPH AT	SUB47	195.	12.30	40.	13.	10.	0.31		
HYDROGRAPH AT	SUB46	1009.	12.25	206.	63.	48.	1.09		
ROUTED TO	RO46	900.	12.55	177.	54.	40.	1.09	96.06	12.60
HYDROGRAPH AT	SUB48	245.	12.10	28.	9.	7.	0.20		
ROUTED TO	RO48	122.	12.30	25.	8.	6.	0.20	91.80	12.45
HYDROGRAPH AT	SUB49	388.	12.30	72.	23.	17.	0.56		
3 COMBINED AT	CO49	1248.	12.50	275.	85.	64.	1.86		
HYDROGRAPH AT	SUB50	137.	12.15	19.	6.	5.	0.10		
ROUTED TO	RO50	122.	12.35	19.	6.	5.	0.10	1.67	12.35
HYDROGRAPH AT	SUB51	173.	12.20	29.	9.	7.	0.22		
2 COMBINED AT	CO51	274.	12.25	48.	15.	11.	0.32		
3 COMBINED AT	CO51.1	1588.	12.50	362.	112.	84.	2.48		
HYDROGRAPH AT	SUB52	1107.	12.45	279.	87.	65.	1.21		
ROUTED TO	RO52	1109.	12.45	279.	87.	65.	1.21	76.86	12.45
DIVERSION TO	DIV52B	217.	12.45	14.	4.	3.	1.21		
HYDROGRAPH AT	DIV52A	891.	12.45	264.	83.	63.	1.21		
HYDROGRAPH AT	DIV52B	217.	12.45	14.	4.	3.	1.21		
ROUTED TO	RO52.1	219.	12.45	14.	4.	3.	1.21	74.41	12.45
DIVERSION TO	DIV52D	128.	12.45	6.	1.	1.	1.21		
HYDROGRAPH AT	DIV52C	91.	12.45	9.	2.	2.	1.21		
HYDROGRAPH AT	DIV52D	128.	12.45	6.	1.	1.	1.21		
ROUTED TO	RO52.2	119.	12.50	6.	1.	1.	1.21	67.91	12.50
DIVERSION TO	DIV52F	2.	12.50	0.	0.	0.	1.21		
HYDROGRAPH AT	DIV52E	117.	12.50	5.	1.	1.	1.21		
HYDROGRAPH AT	DIV52F	2.	12.50	0.	0.	0.	1.21		
ROUTED TO	RO52.3	1.	12.55	0.	0.	0.	1.21	55.80	0.00
DIVERSION TO	DIV52H	0.	0.05	0.	0.	0.	1.21		

HYDROGRAPH AT	DIV52G	1.	12.55	0.	0.	0.	1.21		
4 COMBINED AT	CO52	1096.	12.50	279.	87.	65.	1.21		
ROUTED TO	RO52	1056.	12.65	259.	82.	62.	1.21	96.40	12.65
HYDROGRAPH AT	SUB54	370.	12.25	67.	21.	16.	0.51		
2 COMBINED AT	CO53	1234.	12.60	326.	103.	77.	1.73		
HYDROGRAPH AT	SUB53	328.	12.05	31.	10.	7.	0.16		
HYDROGRAPH AT	DIV52H	0.	0.05	0.	0.	0.	1.21		
2 COMBINED AT	CO53	328.	12.05	31.	10.	7.	0.16		
DIVERSION TO	DIV53B	61.	12.05	1.	0.	0.	0.16		
HYDROGRAPH AT	DIV53A	267.	12.05	30.	9.	7.	0.16		
ROUTED TO	RO53	190.	12.25	30.	9.	7.	0.16	89.74	12.25
HYDROGRAPH AT	DIV53B	61.	12.05	1.	0.	0.	0.16		
HYDROGRAPH AT	SUB55	125.	12.05	12.	4.	3.	0.06		
2 COMBINED AT	CO55	186.	12.05	13.	4.	3.	0.06		
ROUTED TO	RO55	93.	12.30	13.	4.	3.	0.06	89.17	12.30
HYDROGRAPH AT	SUB56	173.	12.15	26.	8.	6.	0.20		
3 COMBINED AT	CO56	435.	12.25	69.	22.	16.	0.42		
2 COMBINED AT	CO56.1	1447.	12.55	394.	125.	94.	2.14		
HYDROGRAPH AT	SUB57	396.	12.30	86.	27.	20.	0.40		

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

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*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            FEBRUARY 1981             *
*          REVISED 14 JUN 85           *
*                                      *
*      RUN DATE: 02/26/1991            *
*          TIME: 10:35:42.78           *
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*       DAVIS, CALIFORNIA 95616        *
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X     X  XXXXXXX   XXXXX          X
X     X  X       X     X        XX
X     X  X       X              X
XXXXXXX  XXXX    X       XXXXX  X
X     X  X       X              X
X     X  X       X     X        X
X     X  XXXXXXX   XXXXX        XXX
```

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

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THE VERSION RELEASED 31JAN85 CONTAINS NEW OPTIONS ON RL AND BA RECORDS, AND ADDS THE HL RECORD. SEE JANUARY 1985 INPUT DESCRIPTION FOR NEW DEFINITIONS.

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::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::            900 ORDINATES             :::
:::            Version  3.2c             :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
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==========
H A E S T A D M E T H O D S
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37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

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

  1           ID        WTM100YR                                        FILE:WTM100Y2.DAT
  2           ID
  3           ID        THIS IS THE HEC-1 COMPUTER MODEL FOR THE WITTMANN AREA DRAINAGE MASTER
  4           ID        STUDY.  THIS STUDY IS PREPARED FOR THE FLOOD CONTROL DISTRICT OF
  5           ID        MARICOPA COUNTY BY THE WLB GROUP, INC.
  6           ID
  7           ID        THIS IS THE 100 YEAR MODEL FOR THE STUDY AREA AND INCLUDES STORAGE
  8           ID        ROUTING AND DIVERSIONS ALONG THE A.T. & S.F. RAILROAD, THE CAP CANAL,
  9           ID        AND THE BEARDSLEY CANAL.
 10           ID
 11           ID        MODIFIED BY A-N WEST TO INCORPORATE SUN VALLEY PARKWAY NORTH FIS
 12           ID        HYDROLOGY ;DATE 11\26\90  REVISED 2\26\91
              $DIAGRAM
 13           IT       3 26JAN87    1200     640
 14           IN      15 26JAN87    1200
 15           IO       5
 16           JD    4.21    .001
 17           PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 18           PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 19           PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 20           PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 21           PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 22           PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 23           PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 24           PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 25           PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 26           PC    .983    .986    .989    .992    .995    .998    1.00   1.000   1.000   1.000
 27           JD    4.17      10
 28           JD    4.00      50
 29           JD    3.93     100
 30           JD    3.82     350

 31           KK       1
 32           KM        RUNOFF FROM SUBWATERSHED 1.
 33           KM        UNIT HYDROGRAPHS HAVE BEEN COMPUTED FOR EACH SUBWATERSHED USING THE
 34           KM        CORPS OF ENGINEERS S-GRAPH COMPUTATIONS FOR UNIT HYDROGRAPHS.  THE
 35           KM        S-GRAPH PROGRAM HAS BEEN DEVELOPED FOR THE PHOENIX MOUNTAIN AND PHOENIX
 36           KM        VALLEY AREAS.  THIS SHOULD GIVE A MORE RELIABLE UNIT HYDROGRAPH FOR THE
 37           KM        HEC-1 PROGRAM TO UTILIZE WITHIN THE WITTMANN ADMS AREA.
 38           BA    .088
 39           LS       0      81       0
 40           UK     200   .0160     .11     100
 41           RK    2900   .0132     .05            TRAP       0      15

 42           KK      C1
 43           KM        STORAGE ROUTE THROUGH C1.  4-30"CMP'S AND 1-24"CMP ON GRAND AV.
 44           RS       1    STOR       0       0
 45           SV       0    1.07    2.00    3.61
 46           SQ       0      36      55     373
 47           SE  1970.5  1972.5    1973  1973.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  48          KK   C62L
  49          KM       ROUTE FLOW FROM C1 TO C62L.
  50          RM      1     .54      .2

  51          KK    62L
  52          KM       RUNOFF FROM SUBWATERSHED 62L.
  53          BA    .36
  54          LS      0      79       0
  55          UK    200   .0150     .12     100
  56          RK   1600   .0100     .05     .07              0      15
  57          RK   5500   .0100     .05                     15      15

  58          KK   C62L
  59          KM       ADD HYDROGRAPHS AT C62L.
  60          HC      2

  61          KK   C62I
  62          KM       ROUTE FLOW FROM C62L TO C62I.
  63          RM      1     .69      .2

  64          KK    62I
  65          KM       RUNOFF FROM SUBWATERSHED 62I.
  66          BA    .54
  67          LS      0      80       0
  68          UK    250   .0150     .12     100
  69          RK   3000   .0076     .05     .09              0      15
  70          RK   7500   .0076     .05                      0      25

  71          KK   C62I
  72          KM       ADD HYDROGRAPHS AT C62I.
  73          HC      2

  74          KK   C62H
  75          KM       ROUTE FLOW FROM C62I TO C62H.
  76          RM      1     .56      .2

  77          KK    62H
  78          KM       RUNOFF FROM SUBWATERSHED 62H.
  79          BA    .55
  80          LS      0      81       0
  81          UK    250   .0150     .12     100
  82          RK   1500   .0082     .05     .04              0      25
  83          RK   8500   .0082     .05                      0      25

  84          KK    62J
  85          KM       RUNOFF FROM SUBWATERSHED 62J.
  86          BA    .88
  87          LS      0      77       0
  88          UK    250   .0150     .07     100
  89          RK   2600   .0089     .05     .05              0      15
  90          RK  12875   .0089     .05                      0      25
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  91          KK    C62H
  92          KM        ADD HYDROGRAPHS AT C62H.
  93          HC       3

  94          KK    C62K
  95          KM        ROUTE FLOW FROM C62H TO C62K
  96          RM       1     .13      .2

  97          KK       2
  98          KM        RUNOFF FROM SUBWATERSHED 2.
  99          BA     .50
 100          LS             78
 101          UK     150   .0160     .11     100
 102          RK   10725   .0146     .05                       0      35

 103          KK      C2
 104          KM        STORAGE ROUTE THROUGH C2.  6'X4' BC ON GRAND AV.
 105          RS       1    STOR       0       0
 106          SV       0     .82    3.61
 107          SQ       0      72     468
 108          SE  1965.5    1968    1970

 109          KK    C62M
 110          KM        ROUTE FLOW FROM C2 TO C62M
 111          RM       1     .33      .2

 112          KK     62M
 113          KM        RUNOFF FROM SUBWATERSHED 62M
 114          BA     .24
 115          LS       0      71       0
 116          UK     200   .0150     .12     100
 117          RK     800   .0090     .05     .08               0      15
 118          RK    5000   .0090     .05                      10      15

 119          KK    C62M
 120          KM        ADD HYDROGRAPHS AT C62M
 121          HC       2

 122          KK    C62K
 123          KM        ROUTE FLOW FROM C62M TO C62K
 124          RM       1    1.01      .2

 125          KK       3
 126          KM        RUNOFF FROM SUBWATERSHED 3.
 127          BA     .35
 128          LS             81
 129          UK     100   .0160     .11     100
 130          RK    9250   .0132     .05           TRAP       0      25
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 131          KK      C3
 132          KM        STORAGE ROUTE THROUGH C3.  50"X30" CMPA ON GRAND AV.
 133          RS       1    STOR       0       0
 134          SV       0     .19    1.36    2.17
 135          SQ       0     5.5      56     335
 136          SE  1966.5    1967    1968  1968.5

 137          KK    C62K
 138          KM        ROUTE FLOW FROM C3 TO C62K.
 139          RM       1    1.50      .2

 140          KK       4
 141          KM        RUNOFF FROM SUBWATERSHED 4.
 142          BA     .65
 143          LS             80
 144          UK     100   .0160     .11     100
 145          RK    2800   .0103     .05    .325                0      50
 146          RK   13000   .0103     .05                        0      30

 147          KK      C4
 148          KM        STORAGE ROUTE THROUGH C4.  48" CMP ON GRAND AV.
 149          RS       1    STOR       0       0
 150          SV       0     .19     .48     .95    1.69
 151          SQ       0      24      74     110     445
 152          SE    1962    1964  1965.5    1966    1967

 153          KK      C4
 154          KM        DIVERT FLOW AT C4.
 155          DT    DIV4
 156          DI       0      74     110     445
 157          DQ       0       0      36     350

 158          KK    C62K
 159          KM        ROUTE FLOW FROM C4 TO C62K.
 160          RM       1    2.06      .2

 161          KK      C4
 162          KM        RETURN DIVERTED FLOW AT C4.
 163          DR    DIV4

 164          KK      C5
 165          KM        ROUTE DIVERTED FLOW FROM C4 TO C5.
 166          RM       1     .21      .2

 167          KK       5
 168          KM        RUNOFF FROM SUBWATERSHED 5.
 169          BA     .35
 170          LS             78
 171          UK     100   .0160     .11     100
 172          RK    7625   .0126     .05                       25       8
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 173          KK      C5
 174          KM        ADD HYDROGRAPHS AT C5.
 175          HC       2

 176          KK      C5
 177          KM        STORAGE ROUTE THROUGH C5.  48" CMP AND 4'X4' BC ON R.R.
 178          RS       1    STOR       0       0
 179          SV       0     .25    1.01    2.91    6.52    8.88    11.5
 180          SQ       0      34      92     148     168     267     533
 181          SE    1940    1942    1944    1946    1947    1948    1949

 182          KK      C5
 183          KM        DIVERT FLOW AT C5.
 184          DT    DIV5
 185          DI       0     168     267     533
 186          DQ       0       0      75     333

 187          KK    C62K
 188          KM        ROUTE FLOW FROM C5 TO C62K.
 189          RM       1    1.45      .2

 190          KK    C62K
 191          KM        ADD HYDROGRAPHS AT C62K.
 192          HC       5

 193          KK      C5
 194          KM        RETURN DIVERTED FLOW AT C5.
 195          DR    DIV5

 196          KK      C6
 197          KM        ROUTE DIVERTED FLOW FROM C5 TO C6.
 198          RM       1     .16      .2

 199          KK       6
 200          KM        RUNOFF FROM SUBWATERSHED 6.
 201          BA     .03
 202          LS              81
 203          UK     100   .0160     .10     100
 204          RK    1400   .0107     .05                       0      20

 205          KK      C6
 206          KM        ADD HYDROGRAPHS AT C6.
 207          HC       2

 208          KK      C6
 209          KM        STORAGE ROUTE THROUGH C6.  36" CMP ON R.R.
 210          RS       1    STOR       0       0
 211          SV       0     .06     .47    1.20    2.32
 212          SQ       0       4      12      95     392
 213          SE  1945.5    1946    1947    1948    1949
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 214          KK      C6
 215          KM        DIVERT FLOW AT C6.
 216          DT    DIV6
 217          DI       0      12      95     392
 218          DQ       0       0      68     350

 219          KK    C62K
 220          KM        ROUTE FLOW FROM C6 TO C62K.
 221          RM       1    2.29      .2

 222          KK      C6
 223          KM        RETURN DIVERTED FLOW AT C6.
 224          DR    DIV6

 225          KK      C7
 226          KM        ROUTE DIVERTED FLOW AT C6 TO C7.
 227          RM       1     .08      .2

 228          KK       7
 229          KM        RUNOFF FROM SUBWATERSHED 7.
 230          BA     .04
 231          LS              81
 232          UK     150   .0160     .10     100
 233          RK    3125   .0138     .05                       0      25

 234          KK      C7
 235          KM        ADD HYDROGRAPHS AT C7.
 236          HC       2

 237          KK      C7
 238          KM        STORAGE ROUTE THROUGH C7.  48" ORCP ON R.R.
 239          RS       1    STOR       0       0
 240          SV       0     .63    3.73    6.87   10.75
 241          SQ       0      23      70      90     250
 242          SE    1940    1942    1944    1945    1946

 243          KK      C7
 244          KM        DIVERT FLOW AT C7.
 245          DT    DIV7
 246          DI       0      90     250
 247          DQ       0       0     135

 248          KK    C62K
 249          KM        ROUTE FLOW FROM C7 TO C62K.
 250          RM       1    1.72      .2

 251          KK     62K
 252          KM        RUNOFF FROM SUBWATERSHED 62K
 253          BA    1.40
 254          LS       0      76       0
 255          UK     400   .0150     .11     100
 256          RK    3600   .0093     .05     .23               0      25
 257          RK   17125   .0093     .05                      20      25
```

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

 258          KK    C62K
 259          KM       ADD HYDROGRAPHS AT C62K
 260          HC       4

 261          KK    C626
 262          KM       ROUTE FLOW FROM C62K TO C626
 263          RM       1     .45      .2

 264          KK      C7
 265          KM       RETURN DIVERTED FLOW AT C7.
 266          DR    DIV7

 267          KK      C8
 268          KM       ROUTE DIVERTED FLOW AT C7 TO C8.
 269          RM       1     .06      .2

 270          KK       8
 271          KM       RUNOFF FROM SUBWATERSHED 8
 272          BA     .01
 273          LS       0      81       0
 274          UK     100   .0160     .10     100
 275          RK    1000   .0100     .05                        0      30

 276          KK      C8
 277          KM       ADD HYDROGRAPHS AT C8.
 278          HC       2

 279          KK      C8
 280          KM       STORAGE ROUTE THROUGH C8.  36" RCP ON R.R.
 281          RS       1    STOR       0       0
 282          SV       0     .15     .42     .84
 283          SQ       0      11      20      71
 284          SE  1938.5    1940    1941    1942

 285          KK      C8
 286          KM       DIVERT FLOW AT C8.
 287          DT    DIV8
 288          DI       0      20      71
 289          DQ       0       0      29

 290          KK    C626
 291          KM       ROUTE FLOW FROM C8 TO C626
 292          RM       1    3.78      .2

 293          KK      C8
 294          KM       RETURN DIVERTED FLOW AT C8.
 295          DR    DIV8

 296          KK      C9
 297          KM       ROUTE DIVERTED FLOW AT C8 TO C9.
 298          RM       1     .13      .2
```

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

 299          KK      9
 300          KM        RUNOFF FROM SUBWATERSHED 9
 301          BA     .08
 302          LS      0      81       0
 303          UK    150   .0160     .10     100
 304          RK   4750   .0114     .05                       0      25

 305          KK      C9
 306          KM        ADD HYDROGRAPHS AT C9.
 307          HC      2

 308          KK      C9
 309          KM        STORAGE ROUTE THROUGH C9.  2'X4' BC ON R.R.
 310          RS      1    STOR       0       0
 311          SV      0     .24     .85
 312          SQ      0      12     122
 313          SE   1932    1933    1934

 314          KK      C9
 315          KM        DIVERT FLOW AT C9.
 316          DT   DIV9
 317          DI      0      12     122
 318          DQ      0       0      90

 319          KK    C626
 320          KM        ROUTE FLOW FROM C9 TO C626
 321          RM      1    3.11      .2

 322          KK     626
 323          KM        RUNOFF FROM SUBWATERSHED 626
 324          BA    1.86
 325          LS      0      78       0
 326          UK    300   .0150     .12     100
 327          RK   3500   .0105     .05     .27               0      25
 328          RK  18250   .0105     .05                      10      25

 329          KK    C626
 330          KM        ADD HYDROGRAPHS AT C626
 331          HC      4

 332          KK    C62E
 333          KM        ROUTE FLOW FROM C626 TO C62E
 334          RM      1     .33      .2

 335          KK     62E
 336          KM        RUNOFF FROM SUBWATERSHED 62E
 337          BA     .68
 338          LS      0      78       0
 339          UK    400    .015     .13     100
 340          RK   3000   .0101     .05     .23   TRAP              20
 341          RK  13625   .0101     .05           TRAP      10      15
```

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

 342          KK    C62E
 343          KM       ADD HYDROGRAPHS AT C62E
 344          HC       2

 345          KK     10A
 346          KM       RUNOFF FROM SUBWATERSHED 10A.
 347          BA    4.94
 348          LS       0      83       0
 349          UI       0     160     400     819    1346    1859    1920    2040    1795    1415
 350          UI    1167     991     837     663     560     464     434     408     334     259
 351          UI     246     157     125     120     106      68      66      63      61      59
 352          UI      46      30      29      29      28      24       0       0       0       0

 353          KK     C10
 354          KM       ROUTE FLOW FROM C10A TO C10.
 355          RM       1    1.36      .2

 356          KK      C9
 357          KM       RETURN DIVERTED FLOW AT C9.
 358          DR    DIV9

 359          KK     C10
 360          KM       ROUTE DIVERTED FLOW AT C9 TO C10.
 361          RM       1     .13      .2

 362          KK      10
 363          KM       RUNOFF FROM SUBWATERSHED 10.
 364          BA    3.93
 365          LS             79
 366          UK     300    .025     .10     100
 367          RK    5500   .0123     .05     .26    TRAP             12
 368          RK   31875   .0123     .05            TRAP      40     12

 369          KK     C10
 370          KM       ADD HYDROGRAPHS AT C10.
 371          HC       3

 372          KK     C10
 373          KM       STORAGE ROUTE THROUGH C1.  IONA WASH HAS A 168' BRIDGE ON THE R.R.
 374          KM       ASSUMED 12-14'X7' BC'S
 375          RS       1    STOR       0       0
 376          SV       0     .76     2.0    4.34    8.08   13.24   19.74
 377          SQ       0    1568    3192    7392   10416   13440   14784
 378          SE    1920    1922    1924    1926    1928    1930    1931

 379          KK    C62E
 380          KM       ROUTE FLOW FROM C10 TO C62E.
 381          RM       1    1.28      .2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 382          KK      11
 383          KM        RUNOFF FROM SUBWATERSHED 11
 384          BA     .20
 385          LS       0      81       0
 386          UK     200   .0190     .10     100
 387          RK    1300   .0155     .05     .10    TRAP              15
 388          RK    7750   .0155     .05            TRAP      15      10

 389          KK      12
 390          KM        RUNOFF FROM SUBWATERSHED 12
 391          BA    .002
 392          LS       0      81       0
 393          UK     100   .0118     .10     100
 394          RK     850   .0118     .05    .002    TRAP              20

 395          KK     C11
 396          KM        ADD HYDROGRAPHS AT C11.
 397          HC       2

 398          KK     C11
 399          KM        STORAGE ROUTE THROUGH C11.  2'X1.5' BC AND 34"X36" CPA.
 400          RS       1    STOR       0       0
 401          SV       0     .57    4.63   16.79
 402          SQ       0      35      75     115
 403          SE    1913    1916    1920    1924

 404          KK    C62E
 405          KM        ROUTE FLOW FROM C11 TO C62E
 406          RM       1    2.88      .2

 407          KK      13
 408          KM        RUNOFF FROM SUBWATERSHED 13
 409          BA     .10
 410          LS       0      81       0
 411          UK     150   .0250     .11     100
 412          RK    2200   .0162     .05     .05    TRAP       0      30
 413          RK    5250   .0162     .05            TRAP      15      10

 414          KK     C13
 415          KM        STORAGE ROUTE THROUGH C13.  2-42" RCP ON R.R.
 416          RS       1    STOR       0       0
 417          SV       0     .19    2.33    6.89    11.2
 418          SQ       0      24     164     250     280
 419          SE  1906.5    1908    1912    1916    1918

 420          KK    C62E
 421          KM        ROUTE FLOW FROM C13 TO C62E
 422          RM       1    2.70      .2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 423          KK    C62E
 424          KM        ADD HYDROGRAPHS AT C62E.
 425          HC       4

 426          KK      14
 427          KM        RUNOFF FROM SUBWATERSHED 14
 428          BA     .01
 429          LS       0      81       0
 430          UK     100   .0106     .10     100
 431          RK     850   .0106     .05     .01    TRAP             30

 432          KK    C62E
 433          KM        ROUTE FLOW FROM C14 TO C62E
 434          RM       1    3.93      .2

 435          KK      15
 436          KM        RUNOFF FROM SUBWATERSHED 15
 437          BA     .57
 438          LS       0      81       0
 439          UK     200   .0200     .10     100
 440          RK    3500   .0159     .05     .11    TRAP             25
 441          RK   13875   .0159     .05            TRAP      25      5

 442          KK     C15
 443          KM        STORAGE ROUTE THROUGH C15.  4'X4' CPA AND 2'X1.5' BC ON R.R.
 444          RS       1    STOR       0       0
 445          SV       0    2.78    9.36   17.15   18.85
 446          SQ       0      92     188     295     500
 447          SE    1898    1902    1906    1909  1909.5

 448          KK     C15
 449          KM        DIVERT FLOW AT C15.
 450          DT   DIV15
 451          DI       0     188     295     500
 452          DQ       0       0      55     250

 453          KK    C62E
 454          KM        ROUTE FLOW FROM C15 TO C62E
 455          RM       1    2.00      .2

 456          KK      16
 457          KM        RUNOFF FROM SUBWATERSHED 16
 458          BA     .62
 459          LS       0      81       0
 460          UK     200    .025     .10     100
 461          RK    2600   .0166     .05     .09    TRAP             20
 462          RK   13500   .0166     .05            TRAP      25     10

 463          KK     C15
 464          KM        RETURN DIVERT AT C15
 465          DR   DIV15
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  466         KK     C16
  467         KM        ROUTE DIVERTED FLOW AT C15 TO C16
  468         RM       1     .10      .2

  469         KK     C16
  470         KM        ADD HYDROGRAPHS AT C16
  471         HC       2

  472         KK     C16
  473         KM        STORAGE ROUTE THROUGH C16. 24"RCP AND 36"X42"CPA ON R.R.
  474         RS       1    STOR       0       0
  475         SV       0     .56    3.22    8.05    9.51   11.06   14.36
  476         SQ       0      42      82      90     125     225     720
  477         SE  1892.5    1896    1900  1902.5    1903  1903.5  1904.5

  478         KK     C16
  479         KM        DIVERT FLOW AT C16
  480         DT   DIV16
  481         DI       0      90     125     225     720
  482         DQ       0       0      25     115     600

  483         KK    C62E
  484         KM        ROUTE FLOW FROM C16 TO C62E
  485         RM       1    2.29      .2

  486         KK      17
  487         KM        RUNOFF FROM SUBWATERSHED 17
  488         BA     .05
  489         LS       0      81       0
  490         UK     200   .0250     .10     100
  491         RK    2500   .0180     .05     .05    TRAP             20

  492         KK     C16
  493         KM        RETURN DIVERTED FLOW AT C16.
  494         DR   DIV16

  495         KK     C17
  496         KM        ROUTE DIVERTED FLOW AT C16 TO C17.
  497         RM       1     .04      .2

  498         KK     C17
  499         KM        ADD HYDROGRAPHS AT C17.
  500         HC       2

  501         KK     C17
  502         KM        STORAGE ROUTE THROUGH C17.  42" ORCP ON R.R.
  503         RS       1    STOR       0       0
  504         SV       0     .28     1.7    2.26    2.92    4.30
  505         SQ       0      42      85     104     166     480
  506         SE    1895    1898  1900.5    1901  1901.5  1902.5
```

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

 507          KK     C17
 508          KM        DIVERT FLOW AT C17.
 509          DT   DIV17
 510          DI       0      85     104     166     480
 511          DQ       0       0      14      68     375

 512          KK    C62E
 513          KM        ROUTE FLOW FROM C17 TO C62E
 514          RM       1    2.34      .2

 515          KK    C62E
 516          KM        ADD HYDROGRAPHS AT C62E.
 517          HC       5

 518          KK      18
 519          KM        RUNOFF FROM SUBWATERSHED 18
 520          BA     .04
 521          LS       0      81       0
 522          UK     200   .0250     .10     100
 523          RK    2100   .0143     .05     .04    TRAP             15

 524          KK     C17
 525          KM        RETURN DIVERT AT C17.
 526          DR   DIV17

 527          KK     C18
 528          KM        ROUTE DIVERTED FLOW AT C17 TO C18.
 529          RM       1     .08      .2

 530          KK     C18
 531          KM        ADD HYDROGRAPHS AT C18.
 532          HC       2

 533          KK     C18
 534          KM        STORAGE ROUTE THROUGH C18.  2'X1.5' BC, 24" RCP, AND 36" RCP ON R.R.
 535          RS       1    STOR       0       0
 536          SV       0    1.14    2.31    5.99    7.27
 537          SQ       0      19      87     140     347
 538          SE  1888.5  1890.5  1891.5  1894.5  1895.5

 539          KK     C18
 540          KM        DIVERT FLOW AT C18.
 541          DT   DIV18
 542          DI       0      19      87     140     347
 543          DQ       0       0      52      70     267

 544          KK    C62E
 545          KM        ROUTE FLOW FROM C18 TO C62E
 546          RM       1    2.71      .2
```

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

 547          KK      19
 548          KM        RUNOFF FROM SUBWATERSHED 19.
 549          BA     .14
 550          LS       0      81       0
 551          UK     200   .0250     .10     100
 552          RK    2500   .0144     .05     .07    TRAP              15
 553          RK    7625   .0144     .05            TRAP              15

 554          KK     C18
 555          KM        RETURN DIVERT AT C18.
 556          DR   DIV18

 557          KK     C19
 558          KM        ROUTE DIVERTED FLOW AT C18 TO C19.
 559          RM       1    .024      .2

 560          KK     C19
 561          KM        ADD HYDROGRAPHS AT C19.
 562          HC       2

 563          KK     C19
 564          KM        STORAGE ROUTE THROUGH C19.  36" RCP ON R.R.
 565          RS       1    STOR       0       0
 566          SV       0     .10     .57    1.67    8.22    9.31   10.42
 567          SQ       0      11      42      65     100     226     410
 568          SE  1884.5    1886    1888    1890  1894.5    1895  1895.5

 569          KK     C19
 570          KM        DIVERT FLOW AT C19.
 571          DT   DIV19
 572          DI       0     100     226     410
 573          DQ       0       0     106     300

 574          KK    C62E
 575          KM        ROUTE FLOW FROM C19 TO C62E
 576          RM       1    2.31      .2

 577          KK      20
 578          KM        RUNOFF FROM SUBWATERSHED 20
 579          BA     .70
 580          LS       0      80       0
 581          UK     200   .0200     .10     100
 582          RK    3500   .0159     .05     .10    TRAP              15
 583          RK   16375   .0159     .05            TRAP      30      10

 584          KK     C19
 585          KM        RETURN DIVERT AT C19.
 586          DR   DIV19
```

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

 587          KK     C20
 588          KM        ROUTE DIVERTED FLOW AT C19 TO C20.
 589          RM       1    .021      .2

 590          KK     C20
 591          KM        ADD HYDROGRAPHS AT C20.
 592          HC       2

 593          KK     C20
 594          KM        STORAGE ROUTE THROUGH C20.  2-3'X3' BC'S.
 595          RS       1    STOR       0       0
 596          SV       0     .16    1.20    1.60    2.10    3.25    3.86
 597          SQ       0      72     156     182     234     550     760
 598          SE  1883.5    1886  1888.5    1889  1889.5    1891  1891.5

 599          KK     C20
 600          KM        DIVERT FLOW AT C20.
 601          DT   DIV20
 602          DI       0     156     182     234     550     760
 603          DQ       0       0       8      36     340     540

 604          KK    C62E
 605          KM        ROUTE FLOW FROM C20 TO C62E
 606          RM       1    1.81      .2

 607          KK      21
 608          KM        RUNOFF FROM SUBWATERSHED 21
 609          BA     .02
 610          LS       0      72       0
 611          UK     100   .0142     .11     100
 612          RK    1550   .0142     .05     .02    TRAP             30

 613          KK     C20
 614          KM        RETURN DIVERTED FLOW AT C20.
 615          DR   DIV20

 616          KK     C21
 617          KM        ROUTE DIVERTED FLOW AT C20 TO C21.
 618          RM       1     .06      .2

 619          KK     C21
 620          KM        ADD HYDROGRAPHS AT C21.
 621          HC       2

 622          KK     C21
 623          KM        STORAGE ROUTE THROUGH C21.  2'X1.5' BC ON R.R.
 624          RS       1    STOR       0       0
 625          SV       0     .06     .38     .94    1.26
 626          SQ       0       6      75     345     588
 627          SE  1886.5  1887.5  1888.5  1889.5    1890
```

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

 628          KK     C21
 629          KM        DIVERT FLOW AT C21.
 630          DT   DIV21
 631          DI      0       6      75     345     588
 632          DQ      0       0      59     323     564

 633          KK    C62E
 634          KM        ROUTE FLOW FROM C21 TO C62E
 635          RM      1    3.36      .2

 636          KK    C62E
 637          KM        ADD HYDROGRAPHS AT C62E.
 638          HC      5

 639          KK     62F
 640          KM        RUNOFF FROM SUBWATERSHED 62F.
 641          BA    2.18
 642          LS             77
 643          UK     400    .015     .12     100
 644          RK    5500   .0095     .05    .545    TRAP             15
 645          RK   22000   .0095     .05            TRAP     50      15

 646          KK    C62E
 647          KM        ADD HYDROGRAPHS AT C62E.
 648          HC      2

 649          KK    C62D
 650          KM        ROUTE FLOW FROM C62E TO C62D
 651          RM      1     .12      .2

 652          KK     62D
 653          KM        RUNOFF FROM SUBWATERSHED 62D
 654          BA    1.66
 655          LS      0      81       0
 656          UK     350   .0110     .13     100
 657          RK    2600    .007     .05     .06    TRAP             20
 658          RK   19750    .007     .05            TRAP     20      15

 659          KK    C62D
 660          KM        ADD HYDROGRAPHS AT C62D
 661          HC      2

 662          KK    C62B
 663          KM        ROUTE FLOW FROM C62D TO C62B
 664          RM      1     .29      .2

 665          KK     62B
 666          KM        RUNOFF FROM SUBWATERSHED 62B
 667          BA    0.49
 668          LS      0      74       0
 669          UK     200    .011     .12     100
 670          RK    1500   .0072     .05    .245    TRAP             25
 671          RK    9750   .0072     .05            TRAP     35      30
```

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

 672          KK     62C
 673          KM        RUNOFF FROM SUBWATERSHED 62C
 674          BA    0.40
 675          LS       0      81       0
 676          UK     200    .012     .12     100
 677          RK    1200   .0076     .05     .20    TRAP              20
 678          RK    9250   .0076     .05            TRAP      20      15

 679          KK    C62B
 680          KM        ADD HYDROGRAPHS AT C62B
 681          HC       3

 682          KK     C62
 683          KM        ROUTE FLOW FROM C62B TO C62
 684          RM       1    1.30      .2

 685          KK     62A
 686          KM        RUNOFF FROM SUBWATERSHED 62A
 687          BA    1.58
 688          LS       0      81       0
 689          UK     300    .011     .11     100
 690          RK    2000   .0069     .05    .395    TRAP              30
 691          RK   18000   .0069     .05            TRAP      35      25

 692          KK     C62
 693          KM        ROUTE FLOW FROM C62A TO C62
 694          RM       1    2.15      .2

 695          KK      62
 696          KM        RUNOFF FROM SUBWATERSHED 62
 697          BA    5.09
 698          LS       0      76       0
 699          UK     600   .0065     .11     100
 700          RK    4200   .0045     .05     .73    TRAP              45
 701          RK   22000   .0045     .05            TRAP      35      40

 702          KK     C62
 703          KM        ADD HYDROGRAPHS AT C62
 704          HC       3

 705          KK     C62
 706          KM        STORAGE ROUTE THROUGH C62.  47.3' WIDE OVERCHUTE ON CAP WEST OF GRAND.
 707          RS       1    STOR       0       0
 708          SV       0   16.23  133.39  466.23  584.29  733.69
 709          SQ       0       0     662    2460    8081   34672
 710          SE    1542  1545.2    1548    1552    1553    1554

 711          KK    C83T
 712          KM        ROUTE FLOW AT C62 TO C83T.
 713          RM       1    1.25      .2
```

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

 714          KK     83T
 715          KM        RUNOFF FROM SUBWATERSHED 83T
 716          BA    1.29
 717          LS       0      75       0
 718          UK     300    .008     .12     100
 719          RK    2700   .0053     .06     .22    TRAP       0      35
 720          RK   21000   .0053     .05            TRAP      20      30

 721          KK    C83T
 722          KM        ADD HYDROGRAPHS AT C83T.
 723          HC       2

 724          KK     C21
 725          KM        RETURN DIVERT AT C21.
 726          DR   DIV21

 727          KK     C22
 728          KM        ROUTE DIVERTED FLOW FROM C21 TO C22.
 729          RM       1     .12      .2

 730          KK      22
 731          KM        RUNOFF FROM SUBWATERSHED 22.
 732          BA     .26
 733          LS              72
 734          UK     400    .020     .10     100
 735          RK    7200   .0132     .05     .26    TRAP              15

 736          KK     C22
 737          KM        ADD HYDROGRAPHS AT C22.
 738          HC       2

 739          KK     C22
 740          KM        STORAGE ROUTE THROUGH C22.  2'X1' BC AND 36"X42" CPA ON R.R.
 741          RS       1    STOR       0       0
 742          SV       0     .10     .74    2.33    2.89    3.48    4.09
 743          SQ       0      11      42      70     135     280     500
 744          SE  1872.5    1874    1876    1878  1878.5    1879  1879.5

 745          KK     C22
 746          KM        DIVERT FLOW AT C22.
 747          DT   DIV22
 748          DI       0      70     135     280     500
 749          DQ       0       0      60     200     415

 750          KK    C63B
 751          KM        ROUTE FLOW FROM C22 TO C63B.
 752          RM       1    1.64      .2

 753          KK     C22
 754          KM        RETURN DIVERTED FLOW AT C22.
 755          DR   DIV22
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 756          KK     C23
 757          KM        ROUTE DIVERTED FLOW AT C22 TO C23.
 758          RM       1    .033      .2

 759          KK      23
 760          KM        RUNOFF FROM  SUBWATERSHED 23.
 761          BA    .006
 762          LS             72
 763          UK     100   .0143     .10     100
 764          RK     700   .0143     .05    .006    TRAP       0      30

 765          KK     C23
 766          KM        ADD HYDROGRAPHS AT C23.
 767          HC       2

 768          KK     C23
 769          KM        STORAGE ROUTE THROUGH C23.  2-10'X4' BC ON R.R.
 770          RS       1    STOR       0       0
 771          SV       0     .14     .51     .88
 772          SQ       0     110     460     707
 773          SE  1870.5    1872  1874.5  1875.5

 774          KK     C23
 775          KM        DIVERT FLOW AT C23.
 776          DT   DIV23
 777          DI       0     460     707
 778          DQ       0       0      87

 779          KK    C63B
 780          KM        ROUTE FLOW FROM C23 TO C63B.
 781          RM       1    1.21      .2

 782          KK     C23
 783          KM        RETURN DIVERT AT C23.
 784          DR   DIV23

 785          KK     C24
 786          KM        ROUTE DIVERTED FLOW AT C23 TO C24.
 787          RM       1     .11      .2

 788          KK      24
 789          KM        RUNOFF FROM SUBWATERSHED 24.
 790          BA    .006
 791          LS             72
 792          UK      50   .0118     .10     100
 793          RK     850   .0118     .05    .004    TRAP              30

 794          KK     C24
 795          KM        ADD HYDROGRAPHS AT C24.
 796          HC       2
```

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

 797          KK     C24
 798          KM        STORAGE ROUTE THROUGH C24.  24" ORCP ON R.R.
 799          RS       1    STOR       0       0
 800          SV       0     .67     .94    1.24
 801          SQ       0      17      44     150
 802          SE  1870.5    1873  1873.5    1874

 803          KK     C24
 804          KM        DIVERT FLOW  AT C24.
 805          DT   DIV24
 806          DI       0      17      44     150
 807          DQ       0       0      23     126

 808          KK    C63B
 809          KM        ROUTE FLOW FROM C24 TO C63B.
 810          RM       1    1.65      .2

 811          KK     C24
 812          KM          RETURN DIVERT AT C24.
 813          DR   DIV24

 814          KK     C25
 815          KM        ROUTE DIVERTED FLOW AT C24 TO C25.
 816          RM       1     .11      .2

 817          KK      25
 818          KM        RUNOFF FROM SUBWATERSHED 25.
 819          BA     .05
 820          LS              72
 821          UK     150   .0200     .10     100
 822          RK    2450   .0143     .05     .05    TRAP             40

 823          KK     C25
 824          KM        ADD HYDROGRAPHS AT C25.
 825          HC       2

 826          KK     C25
 827          KM        STORAGE ROUTE THROUGH C25.  48" ORCP ON R.R.
 828          RS       1    STOR       0       0
 829          SV       0     .38     .58      .8    1.04
 830          SQ       0      23      52      99     171
 831          SE  1860.5  1862.5    1863  1863.5    1864

 832          KK     C25
 833          KM        DIVERT FLOW AT C25.
 834          DT   DIV25
 835          DI       0      23      52      99     171
 836          DQ       0       0      15      52     113
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 837          KK   C63B
 838          KM       ROUTE FLOW FROM C25 TO C63B.
 839          RM      1    1.97      .2

 840          KK   C63B
 841          KM       ADD HYDROGRAPHS AT C63B.
 842          HC      4

 843          KK    26B
 844          KM       RUNOFF FROM SUBWATERSHED 26B.
 845          BA  12.72
 846          LS            86
 847          UI      0    338     778    1523    2576    3691    4131    4635    4635    4085
 848          UI   3258   2817    2330    2215    1580    1471    1204    1050     990     937
 849          UI    858    602     574     536     295     283     272     259     157     151
 850          UI    146    141     137     163      71      69      67      65      64      62
 851          UI     33      0       0       0       0       0       0       0       0       0

 852          KK   C26A
 853          KM       ROUTE FLOW FROM C26B TO C26A.
 854          RM      1     .46      .2

 855          KK    26A
 856          KM       RUNOFF FROM SUBWATERSHED 26A.
 857          BA   2.26
 858          LS            79
 859          UI      0    110     333     715    1044    1207    1152     847     664     559
 860          UI    399    325     268     246     200     151     121      75      70      52
 861          UI     39     37      36      32      18      17      17      16       0       0

 862          KK   C26A
 863          KM       ADD HYDROGRAPHS AT C26A.
 864          HC      2

 865          KK    C26
 866          KM       ROUTE FLOW FROM C26A TO C26.
 867          RM      1     .67      .2

 868          KK    C25
 869          KM       RETURN DIVERTED FLOW AT C25.
 870          DR  DIV25

 871          KK    C26
 872          KM       ROUTE DIVERTED FLOW AT C25 TO C26.
 873          RM      1     .09      .2

 874          KK     26
 875          KM       RUNOFF FROM SUBWATERSHED 26.
 876          BA   1.12
 877          LS            74
 878          UK    200   .0180     .10     100
 879          RK   5500   .0135     .05     .22    TRAP            20
 880          RK  19100   .0135     .05            TRAP     60     15
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 881          KK     C26
 882          KM        ADD HYDROGRAPHS AT C26.
 883          HC       3

 884          KK     C26
 885          KM        STORAGE ROUTE THROUGH C26.  TRIBLY WASH, 237' 17-SPAN 237' BRIDGE.
 886          KM        ASSUME 24-10'X4' BC'S.
 887          RS       1    STOR       0       0
 888          SV       0     .51    1.65    2.63
 889          SQ       0    2040    5520    7200
 890          SE    1854    1856    1858    1859

 891          KK    C63B
 892          KM        ROUTE FLOW FROM C26 TO C63B.
 893          RM       1     .53      .2

 894          KK      27
 895          KM        RUNOFF FROM SUBWATERSHED 27.
 896          BA     .06
 897          LS              72
 898          UK     200    .020     .10     100
 899          RK    2700   .0130     .05     .06    TRAP             30

 900          KK     C27
 901          KM        STORAGE ROUTE THROUGH C27.  3'X2.5' BC AND 36" ORCP ON R.R.
 902          RS       1    STOR       0       0
 903          SV       0     .14     .40     .58
 904          SQ       0      11      24      91
 905          SE  1846.5    1848    1849  1849.5

 906          KK     C27
 907          KM        DIVERT FLOW AT C27.
 908          DT   DIV27
 909          DI       0      24      91
 910          DQ       0       0      56

 911          KK    C63B
 912          KM        ROUTE FLOW FROM C27 TO C63B.
 913          RM       1    1.70      .2

 914          KK     63B
 915          KM        RUNOFF FROM SUBWATERSHED 63B.
 916          BA    1.44
 917          LS              81
 918          UK     250    .015     .12     100
 919          RK    2100   .0111     .05     .20    TRAP             15
 920          RK   14500   .0111     .05            TRAP      25     20

 921          KK    C63B
 922          KM        ADD HYDROGRAPHS AT C63B.
 923          HC       4
```

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

 924          KK    C63C
 925          KM       ROUTE FLOW FROM C63B TO C63C.
 926          RM       1     .32      .2

 927          KK     C27
 928          KM       RETURN DIVERTED FLOW AT C27.
 929          DR   DIV27

 930          KK     C28
 931          KM       ROUTE DIVERTED FLOW AT C27 TO C28.
 932          RM       1     .25      .2

 933          KK      28
 934          KM       RUNOFF FROM SUBWATERSHED 28.
 935          BA     .24
 936          LS              75
 937          UK     200    .020     .10     100
 938          RK    2000   .0147     .05     .08    TRAP              25
 939          RK    7500   .0147     .05            TRAP      10       8

 940          KK     C28
 941          KM       ADD HYDROGRAPHS AT C28.
 942          HC       2

 943          KK     C28
 944          KM       STORAGE ROUTE THROUGH C28.  36"X42" ORCP ON R.R.
 945          RS       1    STOR       0       0
 946          SV       0     .10     .55    1.18    2.14    3.46
 947          SQ       0      11      43      60     172     453
 948          SE  1820.5    1822    1824    1825    1826    1827

 949          KK     C28
 950          KM       DIVERT FLOW AT C28.
 951          DT   DIV28
 952          DI       0      60     172     453
 953          DQ       0       0     102     373

 954          KK    C63C
 955          KM       ROUTE FLOW FROM C28 TO C63C.
 956          RM       1    4.04      .2

 957          KK     C28
 958          KM       RETURN DIVERTED FLOW AT C28.
 959          DR   DIV28

 960          KK     C29
 961          KM       ROUTE DIVERTED FLOW AT C28 TO C29.
 962          RM       1    .044      .2
```

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

  963         KK     29
  964         KM       RUNOFF FROM SUBWATERSHED 29.
  965         BA    .01
  966         LS             81
  967         UK    100   .0300     .10     100
  968         RK   1150   .0174     .05     .01    TRAP              40

  969         KK    C29
  970         KM       ADD HYDROGRAPHS AT C29.
  971         HC      2

  972         KK    C29
  973         KM       STORAGE ROUTE THROUGH C29.  36" ORCP ON R.R.
  974         RS      1    STOR       0       0
  975         SV      0     .38     .95    1.62
  976         SQ      0      11      24     225
  977         SE  1820.5    1822    1823    1824

  978         KK    C29
  979         KM       DIVERT FLOW AT C29.
  980         DT   DIV29
  981         DI      0      24     225
  982         DQ      0       0     183

  983         KK   C63C
  984         KM       ROUTE FLOW FROM C29 TO C63C.
  985         RM      1    4.69      .2

  986         KK    C29
  987         KM       RETURN DIVERT AT C29.
  988         DR   DIV29

  989         KK    C30
  990         KM       ROUTE DIVERTED FLOW AT C29 TO C30.
  991         RM      1    .029      .2

  992         KK     30
  993         KM       RUNOFF FROM SUBWATERSHED 30.
  994         BA    .01
  995         LS             81
  996         UK    100   .0300     .10     100
  997         RK   1100   .0182     .05     .01    TRAP              15

  998         KK    C30
  999         KM       ADD HYDROGRAPHS AT C30.
 1000         HC      2

 1001         KK    C30
 1002         KM       STORAGE ROUTE THROUGH C30.  48" ORCP ON R.R.
 1003         RS      1    STOR       0       0
 1004         SV      0     .51    1.78    2.51
 1005         SQ      0      45     100     285
 1006         SE   1823    1826  1828.5  1829.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1007          KK     C30
1008          KM        DIVERT FLOW AT C30.
1009          DT   DIV30
1010          DI       0     100     285
1011          DQ       0       0     160

1012          KK    C63C
1013          KM        ROUTE FLOW FROM C30 TO C63C.
1014          RM       1    3.88      .2

1015          KK     C30
1016          KM        RETURN DIVERTED FLOW AT C30.
1017          DR   DIV30

1018          KK     C31
1019          KM        ROUTE DIVERTED FLOW AT C30 TO C31.
1020          RM       1    .053      .2

1021          KK      31
1022          KM        RUNOFF FROM SUBWATERSHED 31.
1023          BA     .63
1024          LS              77
1025          UK     200   .0300     .10     100
1026          RK    3000  . 0143     .05     .16    TRAP             10
1027          RK   17500   .0143     .05            TRAP      15     12

1028          KK     C31
1029          KM        ADD HYDROGRAPHS AT C31.
1030          HC       2

1031          KK     C31
1032          KM        STORAGE ROUTE THROUGH C31.  2-3'X4' BC ON R.R.
1033          RS       1    STOR       0       0
1034          SV       0     .24    1.45    6.53    9.87
1035          SQ       0      33     114     222     467
1036          SE  1804.5    1806    1808  1810.5  1811.5

1037          KK     C31
1038          KM        DIVERT FLOW AT C31.
1039          DT   DIV31
1040          DI       0     222     467
1041          DQ       0       0     215

1042          KK    C63C
1043          KM        ROUTE FLOW FROM C31 TO C63C.
1044          RM       1    2.74      .2

1045          KK    C63C
1046          KM        ADD HYDROGRAPHS AT C63C.
1047          HC       5
```

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

1048          KK     C31
1049          KM        RETURN DIVERT AT C31.
1050          DR   DIV31

1051          KK     C32
1052          KM        ROUTE DIVERTED FLOW AT C31 TO C32.
1053          RM       1    .103      .2

1054          KK      32
1055          KM        RUNOFF FROM SUBWATERSHED 32.
1056          BA     .05
1057          LS              81
1058          UK     200   .0200     .10     100
1059          RK    3000   .0133     .05     .05    TRAP             35

1060          KK     C32
1061          KM        ADD HYDROGRAPHS AT C32.
1062          HC       2

1063          KK     C32
1064          KM        STORAGE ROUTE THROUGH C32.  42" ORCP ON R.R.
1065          RS       1    STOR       0       0
1066          SV       0     .38     .89    1.65
1067          SQ       0      21      40     110
1068          SE    1798    1800    1801    1802

1069          KK     C32
1070          KM        DIVERT FLOW AT C32.
1071          DT   DIV32
1072          DI       0      40     110
1073          DQ       0       0      50

1074          KK    C63C
1075          KM        ROUTE FLOW FROM C32 TO C63C.
1076          RM       1   3.76      .2

1077          KK     C32
1078          KM        RETURN DIVERT AT C32.
1079          DR   DIV32

1080          KK     C33
1081          KM        ROUTE DIVERTED FLOW AT C32 TO C33.
1082          RM       1    .09      .2

1083          KK      33
1084          KM        RUNOFF FROM SUBWATERSHED 33.
1085          BA     .02
1086          LS              81
1087          UK     100   .0200     .10     100
1088          RK    1250   .0160     .05     .02    TRAP             30
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1089          KK     C33
1090          KM        ADD HYDROGRAPHS AT C33.
1091          HC       2

1092          KK     C33
1093          KM        STORAGE ROUTE THROUGH C33.  24" CP AND 24" ORCP ON R.R.
1094          RS       1    STOR       0       0
1095          SV       0     .83    1.39
1096          SQ       0      16     154
1097          SE  1787.5  1790.5  1791.5

1098          KK     C33
1099          KM        DIVERT FLOW AT C33.
1100          DT   DIV33
1101          DI       0      16     154
1102          DQ       0       0     128

1103          KK    C63C
1104          KM        ROUTE FLOW FROM C33 TO C63C.
1105          RM       1    4.85      .2

1106          KK     63C
1107          KM        RUNOFF FROM SUBWATERSHED 63C.
1108          BA    1.70
1109          LS             83
1110          UK     200    .015     .12     100
1111          RK    2000   .0108     .05     .28    TRAP              15
1112          RK   15250   .0108     .05            TRAP      25      20

1113          KK    C63C
1114          KM        ADD HYDROGRAPHS AT C63C.
1115          HC       4

1116          KK     C63
1117          KM        ROUTE FLOW FROM C63C TO C63.
1118          RM       1    1.16      .2

1119          KK     63A
1120          KM        RUNOFF FROM SUBWATERSHED 63A.
1121          BA    2.67
1122          LS             78
1123          UK     350     .01     .12     100
1124          RK    5200    .010     .05     .24    TRAP              20
1125          RK   21250    .010     .05            TRAP      25      25

1126          KK     C63
1127          KM        ROUTE FLOW FROM C63A TO C63.
1128          RM       1    1.06      .2
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1129        KK      63
1130        KM        RUNOFF FROM SUBWATERSHED 63.
1131        BA    2.78
1132        LS              78
1133        UK     400     .01     .12     100
1134        RK    3000   .0076     .05     .70    TRAP      10      25
1135        RK   20750   .0076     .05            TRAP      60      40

1136        KK     C63
1137        KM        ADD HYDROGRAPHS AT C63.
1138        HC       3

1139        KK     C63
1140        KM        STORAGE ROUTE THROUGH C63.  135.8' WIDE OVERCHUTE ON CAP WEST OF GRAND.
1141        RS       1    STOR       0       0
1142        SV       0    5.34   60.37   122.3
1143        SQ       0    2310    9506   20740
1144        SE  1544.9    1548  1553.4    1556

1145        KK    C83T
1146        KM        ROUTE FLOW FROM C63 TO C83T
1147        RM       1    1.69      .2

1148        KK     84T
1149        KM        RUNOFF FROM SUBWATERSHED 84T
1150        BA    1.81
1151        LS       0      74       0
1152        UK     400    .006     .13     100
1153        RK    6000   .0037     .06     .36    TRAP       0      35
1154        RK   21800   .0037     .05            TRAP      40      30

1155        KK    C83T
1156        KM        ADD HYDROGRAPHS AT C83T
1157        HC       2

1158        KK    C83T
1159        KM        ADD HYDROGRAPHS AT C83T.
1160        HC       2

1161        KK    C78T
1162        KM        ROUTE FLOW FROM C83T TO C78T
1163        RM       1     .26      .2

1164        KK     60D
1165        KM        RUNOFF FROM SUBWATERSHED 60D.
1166        BA    1.78
1167        LS              85
1168        UK     400   .0150     .12     100
1169        RK    2200   .0075     .05     .59    TRAP              20
1170        RK   14875   .0075     .05            TRAP      25      20
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1171          KK    C60B
1172          KM       ROUTE FLOW FROM C60D TO C60B.
1173          RM       1    1.37      .2

1174          KK     60B
1175          KM       RUNOFF FROM SUBWATERSHED 60B.
1176          BA    3.53
1177          LS              83
1178          UK     400   .0089     .12     100
1179          RK    2600   .0069     .05     .76    TRAP             25
1180          RK   28250   .0069     .05            TRAP      30     20

1181          KK    C60B
1182          KM       ADD HYDROGRAPHS AT C60B.
1183          HC       2

1184          KK    C60A
1185          KM       ROUTE FLOW FROM C60B TO C60A.
1186          RM       1     .59      .2

1187          KK     60C
1188          KM       RUNOFF FROM SUBWATERSHED 60C.
1189          BA    1.19
1190          LS              81
1191          UK     400    .010     .11     100
1192          RK    2800    .007     .05     .17    TRAP             20
1193          RK   11000    .007     .05            TRAP      25     20

1194          KK    C60A
1195          KM       ROUTE FLOW FROM C60C TO C60A.
1196          RM       1    1.88      .2

1197          KK     60A
1198          KM       RUNOFF FROM SUBWATERSHED 60A.
1199          BA    2.88
1200          LS              81
1201          UK     250   .0089     .12     100
1202          RK    1800   .0069     .05     .72    TRAP             25
1203          RK   21125   .0069     .05            TRAP      30     20

1204          KK    C60A
1205          KM       ADD HYDROGRAPHS AT C60A.
1206          HC       3

1207          KK     C60
1208          KM       ROUTE FLOW FROM C60A TO C60.
1209          RM       1     .54      .2

1210          KK      60
1211          KM       RUNOFF FROM SUBWATERSHED 60.
1212          BA    3.29
1213          LS              82
1214          UK     500   .0104     .12     100
1215          RK    4200   .0064     .05     .83    TRAP             30
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1216          RK   23500   .0064     .05           TRAP      30      30

1217          KK     C60
1218          KM       ADD HYDROGRAPHS AT C60.
1219          HC       2

1220          KK      59
1221          KM       RUNOFF FROM SUBWATERSHED 59.
1222          BA    2.29
1223          LS             79
1224          UK     500    .009     .11     100
1225          RK    3500   .0059     .05     .76    TRAP              30
1226          RK   21000   .0059     .05           TRAP      30      30

1227          KK     C60
1228          KM       ROUTE FLOW FROM C59 TO C60.
1229          RM       1     .94      .2

1230          KK     C60
1231          KM       ADD HYDROGRAPHS AT C60.
1232          HC       2

1233          KK      61
1234          KM       RUNOFF FROM SUBWATERSHED 61.
1235          BA    1.27
1236          LS             83
1237          UK     350   .0084     .11     100
1238          RK    2450   .0064     .05     .25    TRAP              35
1239          RK   12500   .0064     .05           TRAP      30      40

1240          KK     C60
1241          KM       ROUTE FLOW FROM C61 TO C60.
1242          RM       1     .60      .2

1243          KK     C60
1244          KM       ADD HYDROGRAPHS AT C60.
1245          HC       2

1246          KK     C60
1247          KM       STORAGE ROUTE THROUGH C60.  67' WIDE OVERCHUTE ON CAP WEST OF GRAND.
1248          RS       1    STOR       0       0
1249          SV       0   11.41   62.95  549.65
1250          SQ       0       0    1876    5695
1251          SE    1533  1535.6    1540  1545.1

1252          KK    C89T
1253          KM       ROUTE FLOW AT C60 TO C89T.
1254          RM       1     .39      .2

1255          KK     88T
1256          KM       RUNOFF FROM SUBWATERSHED 88T
1257          BA     .63
1258          LS       0      75       0
1259          UK     200    .007     .13     100
1260          RK    2500   .0048     .06     .21    TRAP       0      25
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1261          RK    6300   .0048     .05           TRAP      30      20

1262          KK    C89T
1263          KM        ADD HYDROGRAPHS AT C89T
1264          HC       2

1265          KK   SUB01
1266          KM        RUNOFF FROM SUBAREA01
1267          BA    .147
1268          LS       0    72.3
1269          UK     175     .02      .2     100
1270          RK    5500    .019     .05                   20      10

1271          KK    R001
1272          KM        ROUTE SUB01 THROUGH STRUC.#1
1273          RS       1    STOR       0
1274          SV       0     .01    .018     .16     .55
1275          SQ       0      55      85     150     200
1276          SE      71    72.5      73      74   74.75

1277          KK  R001.1
1278          KM        ROUTE SUB01 TO C004
1279          RL                   1.00    89.5
1280          RS      32    FLOW      -1
1281          RC     .05    .045     .05   12500     .01
1282          RX       0     100     230     239     247     252     258     278
1283          RY      91    90.6    90.1    89.4    88.9    90.3    90.3    90.9

1284          KK   SUB02
1285          KM        RUNOFF FROM SUB02
1286          BA   1.199
1287          LS       0    75.9
1288          UK     225     .01     .13     100
1289          RK   12500    .010     .05                  200      10

1290          KK   SUB03
1291          KM        RUNOFF FROM SUB03
1292          BA    .105
1293          LS       0    73.3
1294          UK     100    .016      .2     100
1295          RK    3000    .016     .05                   20      10

1296          KK    R003
1297          KM        ROUTE SUB03 THROUGH STRUC.#2
1298          RS       1    STOR       0
1299          SV       0   0.045     .22     .55     .99    1.82
1300          SQ       0      27      87     118     150     183
1301          SE      69      70      71      72    72.9    74.2

1302          KK   SUB05
1303          KM        RUNOFF FROM SUB05
1304          BA    .191
1305          LS       0    72.6
1306          UK     200    .019      .2     100
1307          RK    8500    .019     .05                   45      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1308          KK   R005
1309          KM       ROUTE SUB05 THROUGH STRUC.#3
1310          RS      1    STOR      0
1311          SV      0    .002    .015     .05    .138
1312          SQ      0      43     105     170     225
1313          SE   67.8      69      70      71      72

1314          KK   C005
1315          KM       COMBINE R003 AND R005
1316          HC      2

1317          KK  R005.1
1318          KM       ROUTE C005 TO C004
1319          RL                   1.00    88.7
1320          RS     14    FLOW      -1
1321          RC    .05    .045     .05   11000    .011
1322          RX     23      41    55.5      57    62.5    65.5      83      90
1323          RY   91.1    90.4    88.5    86.9    87.2    88.5      89    90.4

1324          KK   SUB04
1325          KM       RUNOFF FROM SUB04
1326          BA   .727
1327          LS      0    72.1
1328          UK    333    .011     .13     100
1329          RK  11000    .011     .05                     140      10

1330          KK   C004
1331          KM       COMBINE SUB04 AND R05.1
1332          HC      2

1333          KK  C004.1
1334          KM       COMBINE SUB02, R001.1 AND C004
1335          HC      3

1336          KK   R004
1337          KM       ROUTE C004 TO C006
1338          RL                   1.00     1.5
1339          RS      9    FLOW      -1
1340          RC    .05     .05     .05    4500   .0057
1341          RX      0       2     200     203     223     225     425     428
1342          RY      4       3     1.0       0       0     1.0       3       4

1343          KK   SUB06
1344          KM       RUNOFF FROM SUB06
1345          BA   .632
1346          LS      0    74.1
1347          UK    460    .011     .13     100
1348          RK   7200    .011     .05                     125      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1349          KK    C006
1350          KM        COMBINE SUB06 AND C004
1351          HC       2

1352          KK   SUB07
1353          KM        RUNOFF FROM SUB07
1354          BA    .013
1355          LS       0    74.1
1356          UK     100     .02      .2     100
1357          RK    1500    .018     .05                      2       6

1358          KK    R007
1359          KM        ROUTE SUB07 THROUGH STRUC.#4
1360          RS       1    STOR       0
1361          SV       0    .024    .076    .118
1362          SQ       0      24      66     106
1363          SE    64.8      66      67      68

1364          KK   SUB08
1365          KM        RUNOFF FROM SUB08
1366          BA    .020
1367          LS       0      81
1368          UK     175     .02      .2     100
1369          RK    1200    .018     .05                     15       6

1370          KK   DIV08
1371          KM        DIVERT (DIV08) FLOW THROUGH STRUC.#5, REMAIN.(DIV081) TO STRUC.#6
1372          DT  DIV081
1373          DI       0       6      13      42    55.5
1374          DQ       0       0       0      24      37

1375          KK    C008
1376          KM         COMBINE SUB07 AND DIV08
1377          HC       2

1378          KK   SUB09
1379          KM        RUNOFF FROM SUB09
1380          BA    1.25
1381          LS       0      83
1382          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
1383          UI    76.4    76.4    76.4    76.4   187.6   242.1   304.8   376.5   451.9   489.7
1384          UI    535.    574.    610.    686.    799.    943.    773.    587.    528.    479.
1385          UI    454.    436.    410.    388.    369.    353.    326.    308.    294.    267.
1386          UI    247.    228.    202.    192.    187.    176.    174.    160.    157.    125.
1387          UI    125.    111.     98.     98.     95.     84.     84.     84.     75.     59.
1388          UI    58.5    58.5    58.5    58.5    40.9    37.4    37.4    37.4    37.4    37.4
1389          UI    37.4    37.4    32.8    14.6    14.6    14.6    14.6    14.6    14.6    14.6
1390          UI    14.6    14.6    14.6    14.6    14.6    14.6    14.6    14.6    14.6    14.6
1391          UI    14.6    14.6    14.6    14.6    12.2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1392          KK   DIV09
1393          KM        DIVERT (DIV09) FLOW TO STRUC.#6 AND #7, REMAINDER(DIV091) TO STRUC.11\12
1394          DT  DIV091
1395          DI       0      65     295     680    1397
1396          DQ       0      23     160     402     789

1397          KK  ODIV09
1398          KM        ROUTE DIV09 TO SUN VALLEY PARKWAY
1399          RS       6    FLOW      -1
1400          RC     .06     .05     .06    5000   .0167
1401          RX      73      81      89      94     113     123     189     196
1402          RY    96.5    95.1    94.9    93.9    93.8    94.8    95.0    96.5

1403          KK   SUB10
1404          KM        RUNOFF FROM SUB10
1405          BA    .182
1406          LS       0      78
1407          UK     325    .018      .2     100
1408          RK    5000    .018     .05                     50      10

1409          KK  DIV081
1410          KM        RETREIVE DIV081
1411          DR  DIV081

1412          KK    CO10
1413          KM        COMBINE RODV09,SUB10 AND DIV081
1414          HC       3

1415          KK    RO10
1416          KM        ROUTE CO10 THROUGH STRUC. #6 and #7
1417          RS       1    STOR       0
1418          SV       0    .041    .182    .447    .842
1419          SQ       0     270     674    1248    1800
1420          SE    58.4    59.4    60.4    61.4    62.4

1421          KK  CO10.1
1422          KM        COMBINE RO10 AND CO08
1423          HC       2

1424          KK   SUB11
1425          KM        RUNOFF FROM SUBAREA 11
1426          BA    .027
1427          LS       0      72
1428          UK     100    .015     .20     100
1429          RK    1000    .019     .05                      2       6

1430          KK    RO11
1431          KM        ROUTE SUB11 THROUGH STRUC.#9
1432          RS       1    STOR       0
1433          SV       0    .002    .014     .05    .082    .126    .165
1434          SQ       0       7      19      25    26.5    39.8      54
1435          SE    49.2    50.2    51.2    52.2    52.6    53.2    53.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1436          KK   DIV11
1437          KM        DIVERT (DIV11) FLOW THROUGH STRUC.#9,REMAINDER TO STRUC.12
1438          DT  DIV111
1439          DI       0       7      19      25    26.5    39.8      54
1440          DQ       0       0       0       0       0    10.8      24

1441          KK    CO11
1442          KM        COMBINE DIV11 AND CO10.1
1443          HC       2

1444          KK   SUB12
1445          KM        RUNOFF FROM SUB12
1446          BA    .022
1447          LS       0      81
1448          UK     275    .019     .20     100
1449          RK    3500    .019     .05                     15      10

1450          KK  DIV111
1451          KM        RETREIVE DIV111
1452          DR  DIV111

1453          KK    CO12
1454          KM        COMBINE DIV111 AND SUB12
1455          HC       2

1456          KK    RO12
1457          KM        ROUTE  CO12 THROUGH STRUC.10
1458          RS       1    STOR       0
1459          SV       0    .004    .026    .097    .144    .180    .262
1460          SQ       0       7      19      24      37      55   107.5
1461          SE      45      46      47    47.6    48.3    48.7    49.4

1462          KK   DIV12
1463          KM        DIVERT (DIV12)FLOW THROUGH STRUC.10, REMAINDER (DIV121) TO STRUC.11
1464          DT  DIV121
1465          DI       0       7      19      24      37      55   107.5
1466          DQ       0       0       0       0      12    28.5    77.5

1467          KK  CO12.1
1468          KM        COMBINE DIV12 AND CO11
1469          HC       2

1470          KK  DIV091
1471          KM        RETRIEVE DIV091
1472          DR  DIV091

1473          KK   SUB13
1474          KM        RUNOFF FROM SUB13
1475          BA    .423
1476          LS       0    80.4
1477          UK     200     .03     .25     100
1478          RK   10000     .03     .05                     40      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1479          KK    CO13
1480          KM        COMBINE SUB13 AND DIV091
1481          HC       2

1482          KK    RO13
1483          KM        ROUTE CO13 TO CO14
1484          RS      10    FLOW      -1
1485          RC     .05    .045     .05    8000   .0175
1486          RX      40      75     110     120     150     160     475     680
1487          RY      80      77    76.7    75.7    75.7    76.7    76.9      80

1488          KK   SUB14
1489          KM        RUNOFF FROM SUB14
1490          BA    .503
1491          LS       0    78.3
1492          UK     333    .010     .13     100
1493          RK    6500    .010     .05                     120      10

1494          KK  DIV121
1495          KM        RETRIEVE DIV121
1496          DR  DIV121

1497          KK    CO14
1498          KM        COMBINE SUB14,DIV121 AND RO13
1499          HC       3

1500          KK    RO14
1501          KM        ROUTE CO14 THROUGH STRUC. #11
1502          RS       1    STOR       0
1503          SV       0    .027    .221    .831   1.876   3.149
1504          SQ       0     210     510     930    1410    2102
1505          SE      37      38      39      40      41      42

1506          KK   DIV14
1507          KM        DIVERT (DIV14) THROUGH STRUC.11, REMAINDER TO STRUC.12
1508          DT  DIV141
1509          DI       0     210     510     930    1410    2102
1510          DQ       0       0       0       0       0     302

1511          KK  CO14.1
1512          KM        COMBINE DIV14 AND CO12.1
1513          HC       2

1514          KK  DIV141
1515          KM        RETRIEVE DIV141
1516          DR  DIV141

1517          KK  RO14.1
1518          KM        ROUTE DIV141 THROUGH STRUC. 12
1519          RS       1    STOR       0
1520          SV       0    .207    .666   1.237   1.966
1521          SQ       0     360     750    1140    1637
1522          SE    36.4      38      39      40      41
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1523          KK  CO14.2
1524          KM       COMBINE RO14.1 AND CO14.1
1525          HC       2

1526          KK  RO14.2
1527          KM       ROUTE CO14.2 TO CO16
1528          RL                   1.00    99.7
1529          RS      10    FLOW      -1
1530          RC     .05    .045     .05    6500     .01
1531          RX       0      72      80     280     355     388     442     463
1532          RY   101.5    98.9   100.1   100.1    99.3    99.9    99.4   101.5

1533          KK   SUB15
1534          KM        RUNOFF FROM SUB 15
1535          BA    .316
1536          LS       0    73.5
1537          UK     333    .010     .13     100
1538          RK    6500    .010     .05                     120      10

1539          KK   SUB16
1540          KM       RUNOFF FROM SUB16
1541          BA    .396
1542          LS       0      72
1543          UK     125    .012     .13     100
1544          RK    7500    .012     .05                      60      10

1545          KK    CO16
1546          KM       COMBINE SUB15,SUB16 AND RO14.2
1547          HC       3

1548          KK    RO16
1549          KM       ROUTE CO16 TO CO17
1550          RL                   1.00    99.7
1551          RS       6    FLOW      -1
1552          RC     .05    .045     .05    4000     .01
1553          RX       0       7      80     280     355     388     442     463
1554          RY   101.5    78.9   100.7    99.3    99.3    99.9    99.4   101.5

1555          KK   SUB17
1556          KM       RUNOFF FROM  SUB17
1557          BA    .149
1558          LS       0    73.7
1559          UK     330    .010     .13     100
1560          RK    4000    .010     .05                     120      10

1561          KK    CO17
1562          KM       COMBINE SUB17 AND RO16
1563          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1564          KK  CO17.1
1565          KM       COMBINE ,CO06 AND CO17
1566          HC      2

1567          KK   RO17
1568          KM       ROUTE CO17 TO CO18
1569          RL                   1.00     1.5
1570          RS      9   FLOW      -1
1571          RC    .05     .05     .05    4500   .0057
1572          RX      0       2     200     203     223     225     425     428
1573          RY      4       3     1.0       0       0     1.0       3       4

1574          KK   SUB18
1575          KM       RUNOFF FROM SUB18
1576          BA   .656
1577          LS      0    72.5
1578          UK    180    .012     .13     100
1579          RK   8000    .012     .05                     150      10

1580          KK   CO18
1581          KM       COMBINE SUB18 AND RO17
1582          HC      2

1583          KK   SUB19
1584          KM       RUNOFF FROM SUBAREA 19
1585          BA   .191
1586          LS      0    72.1
1587          UK    450    .016     .20     100
1588          RK   6300    .016     .05                      40      10

1589          KK   RO19
1590          KM       ROUTE SUB19 THROUGH STRUC.#13
1591          RS      1   STOR       0
1592          SV      0    .034     .42     1.2    2.15    3.23
1593          SQ      0     140     340     620     920    1397
1594          SE   31.0    32.0    33.0    34.0    35.0    36.0

1595          KK   SUB20
1596          KM       RUNOFF FROM SUBAREA 20
1597          BA   .812
1598          LS      0    77.4
1599          UK    250    .024     .20     100
1600          RK  12500    .024     .05                     160      10

1601          KK  DIV20A
1602          KM       DIVERT (DIV20A) FLOW TO STRUC.#14, REMAINDER TO STRUC. #15
1603          DT  DIV20B
1604          DI      0     156   462.4  1143.8
1605          DQ      0     102     268     599
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1606          KK    RO20
1607          KM        ROUTE DIV20A THROUGH STRUC.#14
1608          RS       1    STOR       0
1609          SV       0     .14     .57     1.3     2.2    2.71
1610          SQ       0      40      97     165     378     539
1611          SE    27.8      29      30      31      32    32.5

1612          KK  DIV20C
1613          KM        DIVERT (DIV20C) FLOW THROUGH STRUC.#14, REMAINDER (DIV20D) TO STRUC.#15
1614          DT  DIV20D
1615          DI       0      40      97     165     378     539
1616          DQ       0       0       0       0     158     290

1617          KK  CO20.1
1618          KM        COMBINE DIV20B AND RO19
1619          HC       2

1620          KK  DIV20B
1621          KM        RETRIEVE DIV20B
1622          DR  DIV20B

1623          KK  DIV20D
1624          KM        RETRIEVE DIV20D
1625          DR  DIV20D

1626          KK    CO20
1627          KM        COMBINE DIV20B AND DIV20D
1628          HC       2     .01

1629          KK  RO20.1
1630          KM        ROUTE CO20 THROUGH STRUC.#15
1631          RS       1    STOR       0
1632          SV       0    .029     .44    1.22    2.56
1633          SQ       0     100     288     492     760
1634          SE    24.2      25      26    26.8    27.8

1635          KK  CO20.2
1636          KM        COMBINE CO20.1 AND RO20.1
1637          HC       2

1638          KK  RO20.2
1639          KM        ROUTE CO20.2 TO CO21
1640          RL                      1.00   92.75
1641          RS      15    FLOW      -1
1642          RC     .05    .045     .05   11000    .011
1643          RX       0      50      80      87     104     115     164     213
1644          RY    95.1    93.7    93.2    91.4    91.5    93.7    94.4    95.1

1645          KK   SUB21
1646          KM        RUNOFF FROM SUBAREA 21
1647          BA   1.128
1648          LS       0      72
1649          UK     400    .011     .13     100
1650          RK   10500    .011     .05                     150      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1651          KK    CO21
1652          KM        COMBINE RO20.2 AND SUB21
1653          HC       2

1654          KK  CO21.1
1655          KM        COMBINE CO21, AND CO18
1656          HC       2

1657          KK    C89T
1658          KM        ADD HYDROGRAPHS AT C89T.(C89T AND CO21.1)
1659          HC       2

1660          KK    C87T
1661          KM        ROUTE FLOW FROM C89T TO C87T
1662          RM       1     .58      .2

1663          KK     87T
1664          KM        RUNOFF FROM SUBWATERSHED 87T
1665          BA   0.765
1666          LS       0      74       0
1667          UK     200    .008     .13     100
1668          RK    4200   .0049     .06     .35    TRAP       0      30
1669          RK   14300   .0049     .05            TRAP      30      25

1670          KK    C87T
1671          KM        ADD HYDROGRAPHS AT C87T. (C87T AND 87T)
1672          HC       2

1673          KK   SUB22
1674          KM        RUNOFF FROM SUB22
1675          BA   1.136
1676          LS       0      72
1677          UK     420     .01     .13     100
1678          RK    9000     .01     .05                     260      10

1679          KK    CO22
1680          KM        COMBINE SUB22 AND C87T
1681          HC       2

1682          KK   SUB23
1683          KM        RUNOFF FROM SUB23
1684          BA    .287
1685          LS       0      72
1686          UK     180    .019     .25     100
1687          RK    7500    .019     .05                      45      10

1688          KK    RO23
1689          KM        ROUTE SUB23 THROUGH STRUC. 16
1690          RS       1    STOR       0
1691          SV       0    .039    .316    .621   1.032
1692          SQ       0      60     123     160     245
1693          SE    15.4      17      18    18.5      19
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1694          KK   DIV23
1695          KM        DIVERT (DIV23) THROUGH STRUC. 16, REMIANDER TO STRUC.17
1696          DT  DIV231
1697          DI       0      60     123     160     245
1698          DQ       0       0       0       0      60

1699          KK   SUB24
1700          KM        RUNOFF FROM SUB 24
1701          BA   2.860
1702          LS       0    81.8
1703          KM   UH6 FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
1704          UI    140.    140.    140.    140.    140.    335.    403.    525.    595.    708.
1705          UI    827.    878.    938.   1017.   1060.   1116.   1203.   1367.   1556.   1760.
1706          UI   1454.   1110.   1010.    930.    871.    835.    811.    774.    737.    705.
1707          UI    677.    652.    617.    586.    565.    538.    500.    475.    436.    407.
1708          UI    371.    358.    343.    337.    323.    322.    293.    293.    261.    230.
1709          UI    230.    215.    179.    179.    179.    174.    154.    154.    154.    154.
1710          UI    136.    108.    108.    108.    108.    108.    108.     87.     69.     69.
1711          UI    68.6    68.6    68.6    68.6    68.6    68.6    68.6    68.6    36.5    26.9
1712          UI    26.9    26.9    26.9    26.9    26.9    26.9    26.9    26.9    26.9    26.9
1713          UI    26.9    26.9    26.9    26.9    26.9    26.9    26.9    26.9    26.9    26.9
1714          UI    26.9    26.9    26.9    26.9    26.9    18.3

1715          KK  DIV231
1716          KM        RETRIEVE DIV231
1717          DR  DIV231

1718          KK    CO24
1719          KM        COMBINE DIV231 AND SUB24
1720          HC       2

1721          KK  DIV24A
1722          KM        DIVERT (DIV24A) FLOW THROUGH STRUC.17, REMAINDER TO STRUC. 18\19
1723          DT  DIV24B
1724          DI       0     408     783    1717
1725          DQ       0     330     347     950

1726          KK   RO24A
1727          KM        ROUTE DIV24A THROUGH STRUC. 17
1728          RS       1    STOR       0
1729          SV       0    .034    .242    .662   1.217   1.542    1.89
1730          SQ       0     288     706    1224    1764    2052    2730
1731          SE    12.8      14      15      16      17    17.5    18.5

1732          KK  DIV24B
1733          KM        RETRIEVE DIV24B
1734          DR  DIV24B

1735          KK  DIV24C
1736          KM        DIVERT (DIV24C) FLOW THROUGH STRUC.18,REMAINDER (DIV24D) TO STRUC.19
1737          DT  DIV24D
1738          DI       0     330     501     950
1739          DQ       0       0      17     134
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1740          KK   RO24C
1741          KM        ROUTE DIV24C THROUGH STRUC. 18
1742          RS       1    STOR       0
1743          SV       0     .15     .54    1.18    1.94    2.83
1744          SQ       0     418     864    1404    2016    2645
1745          SE    10.5      12      13      14      15      16

1746          KK  DIV24D
1747          KM         RETRIEVE DIV24D
1748          DR  DIV24D

1749          KK   RO24D
1750          KM        ROUTE DIV24D THROUGH STRUC. 19
1751          RS       1    STOR       0
1752          SV       0     .44     .96    1.61    2.35
1753          SQ       0     510     930    1380    1829
1754          SE       7       9      10      11      12

1755          KK  CO24.1
1756          KM        COMBINE DIV23, RO24A, RO24C AND RO24D
1757          HC       4    3.14

1758          KK  SUB25A
1759          KM        RUNOFF FROM SUB25A
1760          BA   .0378
1761          LS       0      72
1762          UK     200    .016      .2     100
1763          RK    2500    .016     .05                      8       5

1764          KK  CO25.1
1765          KM        COMBINE SUB25A AND CO24.1
1766          HC       2    3.18

1767          KK  SUB25B
1768          KM        RUNOFF FROM SUB25B
1769          BA    .098
1770          LS       0      72
1771          UK     200    .017      .2     100
1772          RK    5300    .017     .05                     16      10

1773          KK  CO25.2
1774          KM        COMBINE SUB25B AND CO25.1
1775          HC       2    3.28

1776          KK  SUB25C
1777          KM        RUNOFF FROM SUB25C
1778          BA    .180
1779          LS       0      72
1780          UK     230    .016      .2     100
1781          RK    8000    .016     .05                     40      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1782          KK   RO25C
1783          KM        ROUTE TO STRUC. #24
1784          RS       1    STOR       0
1785          SV       0    .026     .06    .075    .111     .31
1786          SQ       0    52.5      81      94     139     329
1787          SE    91.3    93.2    94.1    94.4    94.9    95.8

1788          KK  DV25C1
1789          KM        DIVERT (DV25C1) FLOW TO STRUC.#24,REMAINDER TO STRUC.#25
1790          DT  DV25C2
1791          DI       0    52.5      81      94     139     329
1792          DQ       0       0       0       4      40     329

1793          KK  CO25.3
1794          KM        COMBINE DV25C1 AND CO25.2
1795          HC       2    3.46

1796          KK  SUB25D
1797          KM        RUNOFF FROM SUBAREA 25D
1798          BA    .652
1799          LS       0    75.4
1800          UK     250   .0256     .25     100
1801          RK   12500   .0256     .05                      80      10

1802          KK  DV25C2
1803          KM        RETRIEVE DV25C2
1804          DR  DV25C2

1805          KK   CO25D
1806          KM        COMBINE DV25C2 AND SUB25D
1807          HC       2

1808          KK   RO25D
1809          KM        ROUTE CO25D  THROUGH STRUC. 25
1810          RS       1    STOR       0
1811          SV       0    .286    .694    .946   1.578
1812          SQ       0     144     293     380     516
1813          SE    80.4      82      83    83.5    84.5

1814          KK  DV25D1
1815          KM        DIVERT DV25D1 FLOW TO STRUC.#25, REMAINDER TO STRUC. #26
1816          DT  DV25D2
1817          DI       0     144     293     380     540
1818          DQ       0       0       0       0      24

1819          KK  CO25.4
1820          KM        COMBINE DV25D1 AND CO25.3
1821          HC       2    4.11
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1822          KK   SUB28
1823          KM        RUNOFF FROM SUB28 FOR ROUTING THROUGH STRUC. 26
1824          BA    .089
1825          LS       0      72
1826          UK     150   .0167     .20     100
1827          RK    6500   .0167     .05                       8      10

1828          KK  DV25D2
1829          KM        RETRIEVE DV25D2
1830          DR  DV25D2

1831          KK    CO28
1832          KM        COMBINE DV25D2 AND SUB28
1833          HC       2

1834          KK  CO28.1
1835          KM        COMBINE CO28 AND CO25.4
1836          HC       2

1837          KK    RO28
1838          KM        ROUTE CO28 TO CO28.1
1839          RL                     1.00    93.5
1840          RS       8    FLOW      -1
1841          RC     .05    .045     .05    7000    .011
1842          RX      10      13     153     157     166     172     394     398
1843          RY    96.5    94.9    94.3    91.5    91.9    94.3    94.5    96.5

1844          KK   SUB26
1845          KM        RUNOFF FROM SUB26
1846          BA    .574
1847          LS       0      72
1848          UK     260    .011     .15     100
1849          RK    7000    .011     .05                     250      10

1850          KK  CO28.2
1851          KM        COMBINE SUB26 AND RO28
1852          HC       2    4.78

1853          KK  RO28.1
1854          KM        ROUTE CO28.1 TO CO27
1855          RL                     1.00    93.5
1856          RS       8    FLOW      -1
1857          RC     .05    .045     .05    7000    .011
1858          RX      10      13     153     157     166     172     394     398
1859          RY    96.5    94.9    94.3    91.5    91.9    94.3    94.5    96.5

1860          KK   SUB27
1861          KM        RUNOFF FROM SUB27
1862          BA    .318
1863          LS       0      72
1864          UK     200    .010     .13     100
1865          RK    7000    .010     .05                     200      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1866          KK    CO27
1867          KM        COMBINE SUB27, CO22 AND RO28.1
1868          HC       3

1869          KK   SUB36
1870          KM        RUNOFF FROM SUB36
1871          BA    .369
1872          LS       0      72
1873          UK     250    .011     .13     100
1874          RK    9000    .011     .05                      60      10

1875          KK    CO36
1876          KM        COMBINE SUB36 AND CO27
1877          HC       2

1878          KK   SUB29
1879          KM        RUNOFF FROM SUB29
1880          BA    .178
1881          LS       0      72
1882          UK     160    .015     .20     100
1883          RK    6000    .015     .05                      30      10

1884          KK   SUB30
1885          KM        RUNOFF FROM SUB30
1886          BA   2.722
1887          LS       0      82
1888          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
1889          UI    169.    169.    169.    169.    434.    549.    687.    854.   1005.   1099.
1890          UI   1199.   1278.   1364.   1568.   1827.   2081.   1570.   1255.   1130.   1042.
1891          UI    990.    946.    892.    840.    800.    755.    704.    669.    629.    576.
1892          UI    525.    468.    441.    413.    402.    388.    366.    353.    304.    277.
1893          UI    270.    216.    216.    216.    189.    185.    185.    182.    129.    129.
1894          UI    129.    129.    129.    100.     83.     83.     83.     83.     83.     83.
1895          UI    82.6    76.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3
1896          UI    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3    32.3
1897          UI    32.3    32.3    32.3    18.9

1898          KK    CO30
1899          KM        COMBINE SUB29 AND SUB30
1900          HC       2

1901          KK  DIV30A
1902          KM        DIVERT (DIV30A) FLOW TO DETENTION (RO30),REMAINDER TO STRUC. 27
1903          DT  DIV30B
1904          DI       0      10     100    1000    3000
1905          DQ       0       5      50     500    1500

1906          KK    RO30
1907          KM        ROUTE DIV30A THROUGH DETENTION BASIN IN ROUTE TO STRUC. 27
1908          RS       1    STOR       0
1909          SV       0    .125    .525    1.14    1.87    2.72    3.71    4.26
1910          SQ       0       3     5.2     6.7     205     567    1034    1302
1911          SE      39      40      41      42      43      44      45    45.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1912          KK  DIV30B
1913          KM       RETRIEVE DIV30B
1914          DR  DIV30B

1915          KK  CO30.1
1916          KM       COMBINE DIV30B AND RO30
1917          HC      2

1918          KK  RO30.1
1919          KM       ROUTE CO30.1 THROUGH STRUC.27
1920          RS      1    STOR      0
1921          SV      0     .56     1.4    2.58    3.62    4.52
1922          SQ      0     612    1116    1656    2160    2664
1923          SE     29      31      32      33      34      35

1924          KK   SUB31
1925          KM       RUNOFF FROM SUB31
1926          BA    .34
1927          LS      0    78.8
1928          UK    300    .025     .20     100
1929          RK   8500    .025     .05                     30      10

1930          KK   SUB32
1931          KM       RUNOFF FROM SUB32
1932          BA   .480
1933          LS      0    82.2
1934          KM   UH6 FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
1935          UI   50.4    50.4   101.7   179.9   262.8   322.1   370.8   420.1   538.2   542.7
1936          UI   364.    312.    287.    261.    239.    214.    196.    168.    144.    127.
1937          UI   119.    110.     98.     83.     67.     64.     56.     55.     44.     39.
1938          UI   38.6    31.9    24.7    24.7    24.7    24.7    17.8     9.7     9.7     9.7
1939          UI    9.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7     3.5

1940          KK    CO32
1941          KM       COMBINE SUB31 AND SUB32
1942          HC      2

1943          KK    RO32
1944          KM       ROUTE CO32 THROUGH STRUC. 28
1945          RS      1    STOR      0
1946          SV      0     .62    1.59    3.02    4.71    6.47    8.39
1947          SQ      0     576     972    1512    2160    2880    3600
1948          SE   19.3      21      22      23      24      25      26

1949          KK  SUB32A
1950          KM       RUNOFF FROM SUB32A TO STRUC.29
1951          BA   .033
1952          LS      0      72
1953          UK    250    .014      .2     100
1954          RK   1900    .014     .05                      6      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1955          KK   RO32A
1956          KM        ROUTE TO STRUC. #29
1957          RS       1    STOR      -1
1958          SV       0     .14     .26     .49
1959          SQ       0      14      72     182
1960          SE    22.4    23.9    24.4    24.9

1961          KK  DV32A1
1962          KM        DIVERT DV32A1 TO STRUC.#29, REMAINDER TO STRUC. #30
1963          DT  DV32A2
1964          DI       0      14      72     182
1965          DQ       0       0    50.4   152.5

1966          KK  CO32.1              *
1967          KM        COMBINE RO30.1, RO32 AND DV32A1
1968          HC       3

1969          KK  RO32.1
1970          KM        ROUTE CO32.1 TO CO34
1971          RL                    1.00    94.3
1972          RS       3    FLOW      -1
1973          RC     .05    .045     .05    3000    .008
1974          RX       0      21      33      38      44     111     117     212
1975          RY    97.0    92.2    93.1    92.6    93.1   93.55    93.1    97.0

1976          KK   SUB33
1977          KM        RUNOFF FROM SUB33
1978          BA    .105
1979          LS       0      72
1980          UK     200     .01     .15     100
1981          RK    3000    .008     .05                    250      10

1982          KK   SUB34
1983          KM        RUNOFF FROM SUB34
1984          BA    .198
1985          LS       0      72
1986          UK     350   .0129     .13     100
1987          RK    4500   .0129     .05                     25      10

1988          KK    CO34
1989          KM        COMBINE SUB34, SUB33 AND RO32.1
1990          HC       3

1991          KK    RO34
1992          KM        ROUTE CO34 TO CO35
1993          RL                    1.00    94.3
1994          RS       3    FLOW      -1
1995          RC     .05    .045     .05    3100    .008
1996          RX       0      21      33      38      44     111     117     212
1997          RY    97.0    92.2    93.1    92.6    93.1   93.55    93.1    97.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1998          KK   SUB35
1999          KM        RUNOFF FROM SUB35
2000          BA    .093
2001          LS       0      72
2002          UK     200     .01     .15     100
2003          RK    3100    .008     .05                     250      10

2004          KK    C035
2005          KM        COMBINE SUB35 AND R034
2006          HC       2

2007          KK  C035.1
2008          KM        COMBINE  C035 AND C036
2009          HC       2

2010          KK    C81T
2011          KM        ROUTE FLOW FROM C87T TO C81T
2012          RM       1     .29      .2

2013          KK   SUB38
2014          KM        RUNOFF FROM SUB38
2015          BA    .556
2016          LS       0      72
2017          UK     300    .011     .13     100
2018          RK    7000    .011     .05                     120      10

2019          KK   SUB39
2020          KM        RUNOFF FROM SUB39
2021          BA    .707
2022          LS       0    79.3
2023          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
2024          UI    90.3    90.3   280.0   430.2   575.1   678.9   824.3  1048.1   674.3   557.7
2025          UI    501.    447.    397.    352.    296.    246.    218.    201.    174.    143.
2026          UI    115.    106.     99.     78.     69.     67.     44.     44.     44.     44.
2027          UI    18.5    17.3    17.3    17.3    17.3    17.3    17.3    17.3    17.3    17.3
2028          UI    10.1

2029          KK  DV32A2
2030          KM        RETRIEVE DV32A2
2031          DR  DV32A2

2032          KK    C039
2033          KM        COMBINE DV32A2 AND SUB39
2034          HC       2

2035          KK    R039
2036          KM        ROUTE  C039 THROUGH STRUC 30
2037          RS       1    STOR       0
2038          SV       0    .018    .085    .241    .865    1.32    1.86
2039          SQ       0      72     204     312     533     693     947
2040          SE      97      98      99    99.7   100.7   101.2   101.7
```

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

2041          KK   DIV39
2042          KM        DIVERT (DIV39) FLOW THROUGH STRUC. 30, REMAINDER  TO STRUC.31
2043          DT  DIV391
2044          DI       0      72     204     312     533     693     947
2045          DQ       0       0       0       0      65     165     357

2046          KK  RO39.1
2047          KM        ROUTE DIV39 TO CO40
2048          RL                     1.00    92.2
2049          RS      10    FLOW      -1
2050          RC     .05    .045     .05    6000   .0092
2051          RX       0      20      75      87      97      99     150     165
2052          RY    94.5    93.6    93.6    90.9    91.9    92.9    92.8    94.5

2053          KK   SUB40
2054          KM        RUNOFF FROM SUB40
2055          BA    .285
2056          LS       0      72
2057          UK     250     .01     .13     100
2058          RK    6000   .0092     .05                     80      10

2059          KK    CO40
2060          KM        COMBINE SUB40, SUB38 AND RO39.1
2061          HC       3   1.548

2062          KK    C81T
2063          KM        ADD HYDROGRAPHS AT C81T. (C87T AND CO40)
2064          HC       2

2065          KK  DIV391
2066          KM        RETRIEVE DIV391
2067          DR  DIV391

2068          KK   SUB41
2069          KM        RUNOFF FROM SUB41
2070          BA   1.156
2071          LS       0    83.7
2072          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
2073          UI    95.2    95.2    95.2   250.3   344.9   466.1   575.8   645.2   712.4   785.0
2074          UI    946.   1152.    863.    677.    597.    558.    519.    483.    449.    415.
2075          UI    381.    351.    313.    276.    247.    233.    219.    206.    193.    156.
2076          UI    149.    122.    122.    108.    104.    104.     76.     73.     73.     73.
2077          UI    51.1    46.6    46.6    46.6    46.6    46.6    34.4    18.3    18.3    18.3
2078          UI    18.3    18.3    18.3    18.3    18.3    18.3    18.3    18.3    18.3    18.3
2079          UI    18.3    18.3    16.6

2080          KK    CO41
2081          KM        COMBINE DIV391 AND SUB41
2082          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2083          KK   DIV41
2084          KM        DIVERT (DIV41) FLOW THROUGH STRUC. 31,REMAINDER TO STRUC. 32
2085          DT  DIV411
2086          DI       0     200     448     740    1316    1981
2087          DQ       0       0       0       0     276     781

2088          KK    RO41
2089          KM        ROUTE DIV41 THROUGH STRUC. 31
2090          RS       1    STOR       0
2091          SV       0     .25     .75    1.56    2.60    3.81
2092          SQ       0     200     448     740    1316    1981
2093          SE    86.6      88      89      90      91      92

2094          KK  DIV411
2095          KM        RETRIEVE DIV411
2096          DR  DIV411

2097          KK   SUB42
2098          KM        RUNOFF FROM SUBAREA 42
2099          BA    .418
2100          LS       0    81.8
2101          KM   UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
2102          UI    50.6    50.6   139.6   223.0   310.3   365.7   424.3   568.1   469.9   338.4
2103          UI    298.    267.    242.    213.    190.    163.    132.    122.    112.     97.
2104          UI    81.8    64.7    60.9    55.5    47.7    38.8    38.8    29.1    24.8    24.8
2105          UI    24.8    19.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7     9.7
2106          UI     9.7     9.7     7.5

2107          KK  DIV42A
2108          KM        DIVERT (DIV42A) FLOW TO STRUC.#32, REMAINDER TO STRUC.#33/#34
2109          DT  DIV42B
2110          DI       0      12      42      72      95     338     684
2111          DQ       0       0       0       0       0     125     312

2112          KK  CO42.1
2113          KM        COMBINE DIV411 AND DIV42A
2114          HC       2

2115          KK  RO41.1
2116          KM        ROUTE CO42.1 THROUGH STRUC.32
2117          RS       1    STOR       0
2118          SV       0     .37     .89    1.69    2.93
2119          SQ       0     612    1116    1728    2376
2120          SE      79      81      82      83      84

2121          KK  DIV42B
2122          KM        RETRIEVE DIV42B
2123          DR  DIV42B
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2124          KK  DIV42C
2125          KM       DIVERT (DIV42C) FLOW TO STRUC. #33, REMAINDER TO STRUC.#34
2126          DT  DIV42D
2127          DI      0      12      42      72      95     213     372
2128          DQ      0       0       0       0      20     117     270

2129          KK    RO42
2130          KM       ROUTE DIV42C THROUGH STRUC.#33
2131          RS      1    STOR       0
2132          SV      0    .018    .168    .563   1.107    2.24    3.21
2133          SQ      0      12      42      72      95     338     684
2134          SE   80.3    81.2    82.2    83.2      84    85.1    85.7

2135          KK    CO42
2136          KM       COMBINE RO41, RO41.1 AND RO42
2137          HC      3   1.574

2138          KK    RO42
2139          KM       ROUTE CO42 TO CO43
2140          RL                    1.00    93.7
2141          RS      6    FLOW      -1
2142          RC    .05    .045     .05    4500    .009
2143          RX      0      30      95     101     111     144     155     185
2144          RY   96.5    94.2    94.3    91.9    93.2    94.0    93.0    96.5

2145          KK   SUB43
2146          KM       RUNOFF FROM SUB 43
2147          BA   .158
2148          LS      0      72
2149          UK    200     .01     .13     100
2150          RK   4500    .009     .05                     120      10

2151          KK    CO43
2152          KM       COMBINE SUB43 AND RO42
2153          HC      2

2154          KK     82T
2155          KM       RUNOFF FROM SUBWATERSHED 82T
2156          BA    1.59
2157          LS      0      75       0
2158          UK    300    .007     .15     100
2159          RK   3200   .0053     .06     .40    TRAP       0      35
2160          RK  20600   .0053     .05            TRAP      15      30

2161          KK    C81T
2162          KM       ADD HYDROGRAPHS AT C81T  (C81T,CO43 AND 82T)
2163          HC      3

2164          KK    C78T
2165          KM       ROUTE FLOW FROM C81T TO C78T
2166          RM      1     .23      .2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2167          KK    78T
2168          KM       RUNOFF FROM SUBWATERSHED 78T
2169          BA   .605
2170          LS      0      72       0
2171          UK    300    .009     .15     100
2172          RK   3400   .0063     .06     .28    TRAP      0      35
2173          RK   8200   .0063     .05            TRAP     70      30

2174          KK   C78T
2175          KM         ADD C78T, 78T ANDC78T
2176          HC      3

2177          KK  DIV42D
2178          KM       RETRIEVE DIV42D
2179          DR  DIV42D

2180          KK   SUB44
2181          KM       RUNOFF FROM SUB44
2182          BA   .096
2183          LS      0   72.8
2184          UK    170    .017     .20     100
2185          RK   3500    .017     .05                     18      10

2186          KK   CO44
2187          KM       COMBINE DIV42D AND SUB44
2188          HC      2

2189          KK   RO44
2190          KM        ROUTE SUB44 TO CO45
2191          RL                   1.00     1.0
2192          RS      5   FLOW      -1
2193          RC    .05    .045     .05    4500     .01
2194          RX      0       2     100     103     118     121     220     222
2195          RY      3       2     1.5       0       0     1.5       2       3

2196          KK   SUB45
2197          KM       RUNOFF FROM SUB45
2198          BA   .218
2199          LS      0      72
2200          UK    375     .01     .13     100
2201          RK   4500     .01     .05                     60      10

2202          KK   CO45
2203          KM       COMBINE SUB45 AND RO44
2204          HC      2

2205          KK   SUB47
2206          KM       RUNOFF FROM SUB47
2207          BA   .305
2208          LS      0      72
2209          UK    300     .01     .13     100
2210          RK   4500     .01     .05                     40      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2211          KK   C047
2212          KM       COMBINE SUB47 AND C045
2213          HC      2

2214          KK   C78T
2215          KM       ADD HYDROGRAPHS AT C78T (C78T,     AND C047)
2216          HC      2

2217          KK   C76T
2218          KM       ROUTE FLOW FROM C78T TO C76T
2219          RM      1     .69      .2

2220          KK    79T
2221          KM       RUNOFF FROM SUBWATERSHED 79T
2222          BA    2.8
2223          LS      0      72       0
2224          UK    200    .009     .15     100
2225          RK   4600   .0059     .06     .40    TRAP      0      35
2226          RK  21100   .0059     .05            TRAP     25      30

2227          KK   C76T
2228          KM       ROUTE FLOW FROM C79T TO C76T
2229          RM      1    1.30      .2

2230          KK   C76T
2231          KM       ADD HYDROGRAPHS AT C76T.
2232          HC      2

2233          KK  SUB46
2234          KM       RUNOFF FROM SUB46
2235          BA  1.094
2236          LS      0    79.6
2237          KM  UH6 FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
2238          UI   130.    130.    342.    556.    788.    926.   1061.   1390.   1323.    900.
2239          UI   777.    706.    633.    567.    508.    430.    362.    322.    298.    272.
2240          UI   214.    181.    166.    143.    142.    100.    100.     93.     64.     64.
2241          UI   63.7    63.7    34.7    24.9    24.9    24.9    24.9    24.9    24.9    24.9
2242          UI   24.9    24.9    24.9    14.2

2243          KK   R046
2244          KM       ROUTE SUB46 TO C049
2245          RL                   1.00   94.75
2246          RS      7    FLOW      -1
2247          RC    .05    .045     .05    5000    .011
2248          RX      0     128     179     182     198     289     307     310
2249          RY   97.0    95.7    95.2    93.5    94.9    94.4    96.5    97.0

2250          KK  SUB48
2251          KM       RUNOFF FROM SUB48
2252          BA   .205
2253          LS      0      73
2254          UK    110     .03     .20     100
2255          RK   3000     .03     .05                     40      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2256          KK   RO48
2257          KM       ROUTE SUB46 TO CO49
2258          RL                   1.00   91.95
2259          RS     4   FLOW      -1
2260          RC   .05   .045     .05    5000    .011
2261          RX     0     25      43      46      56      63      88     102
2262          RY  94.9   91.6    91.7    90.0    90.0    91.6      93    94.9

2263          KK  SUB49
2264          KM       RUNOFF FROM SUB49
2265          BA  .556
2266          LS     0     72
2267          UK   150   .011     .20     100
2268          RK  4500   .011     .05                     100      10

2269          KK   CO49
2270          KM       COMBINE RO46, RO48 AND SUB49
2271          HC     3

2272          KK   C76T
2273          KM       ROUTE FLOW FROM CO49 TO C76T
2274          RM     1   1.08      .2

2275          KK   C76T
2276          KM       ADD HYDROGRAPHS AT C76T.(C76T AND C76T)
2277          HC     2

2278          KK    76T
2279          KM       RUNOFF FROM SUBWATERSHED 76T
2280          BA  4.05
2281          LS     0     72       0
2282          UK   300   .007     .14     100
2283          RK  7000  .0062     .06     .41    TRAP      0      35
2284          RK 22100  .0062     .05            TRAP     80      30

2285          KK   C76T
2286          KM       ADD HYDROGRAPHS AT C76T (76T ANDC76T)
2287          HC     2

2288          KK    66
2289          KM       RUNOFF FROM SUBWATERSHED 66
2290          BA   .54
2291          LS     0     73       0
2292          UK   300  .0195     .11     100
2293          RK  2000  .0182     .07     .14    TRAP      0      20
2294          RK  7700  .0182     .05            TRAP     20      15

2295          KK    C67
2296          KM       ROUTE FLOW FROM C66 TO C67
2297          RM     1    .28      .2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2298          KK     67
2299          KM       RUNOFF FROM SUBWATERSHED 67
2300          BA   6.20
2301          LS      0      84       0
2302          UI      0      98     198     270     434     579     823    1059    1287    1528
2303          UI   1787    1927    1716    1976    1976    1976    1976    1606    1436    1358
2304          UI   1289    1114    1012     967     926     906     679     654     630     608
2305          UI    501     462     447     433     420     408     396     386     363     260
2306          UI    254     248     242     236     203     127     124     121     119     116
2307          UI    114     128      68      67      65      64      63      62      61      60
2308          UI     59      58      57      78      31      30      30      29      29      28
2309          UI     28      28      27      27      26      26       9       0       0       0

2310          KK    C67
2311          KM       ADD HYDROGRAPHS AT C67
2312          HC      2

2313          KK    C68
2314          KM       ROUTE FLOW FROM C67 TO C68
2315          RM      1     .16      .2

2316          KK     68
2317          KM       RUNOFF FROM SUBWATERSHED 68
2318          BA   1.67
2319          LS      0      81       0
2320          UI      0      44      90     157     244     373     490     626     709     665
2321          UI    737     737     687     542     501     447     378     355     344     252
2322          UI    239     228     180     169     161     155     149     143     113      95
2323          UI     92      89      70      47      45      44      43      44      25      24
2324          UI     24      23      23      22      22      21      22      11      11      11
2325          UI     11      10      10      10      10       4       0       0       0       0

2326          KK    C68
2327          KM       ADD HYDROGRAPHS AT C68
2328          HC      2

2329          KK    C69
2330          KM       ROUTE FLOW FROM C68 TO C69
2331          RM      1     .54      .2

2332          KK     69
2333          KM       RUNOFF FROM SUBWATERSHED 69
2334          BA    .71
2335          LS      0      73       0
2336          UK    300   .0182     .11     100
2337          RK   1700   .0164     .07     .14    TRAP      0      15
2338          RK   9000   .0164     .05            TRAP     20      10

2339          KK    C69
2340          KM       ADD HYDROGRAPHS AT C69
2341          HC      2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2342          KK     C70
2343          KM        ROUTE FLOW FROM C69 TO C70
2344          RM       1     .25      .2

2345          KK     70A
2346          KM        RUNOFF FROM SUBWATERSHED 70A
2347          BA    5.87
2348          LS       0      85       0
2349          UI       0     138     281     460     700    1100    1446    1817    2191    2148
2350          UI    2405    2405    2405    2186    1763    1641    1495    1249    1177    1228
2351          UI     841     800     763     691     567     544     523     503     485     468
2352          UI     383     311     301     292     285     155     150     146     142     139
2353          UI     134      82      80      78      76      74      73      71      70      90
2354          UI      37      36      36      35      34      34      33      32      32      19
2355          UI       0       0       0       0       0       0       0       0       0       0

2356          KK     C70
2357          KM        ROUTE FLOW FROM C70A TO C70
2358          RM       1     .60      .2

2359          KK      70
2360          KM        RUNOFF FROM SUBWATERSHED 70
2361          BA    1.03
2362          LS       0      76       0
2363          UK     350    .025     .10     100
2364          RK    2100   .0162     .07     .20    TRAP       0      20
2365          RK   15000   .0162     .05            TRAP      35      15

2366          KK     C70
2367          KM        ADD HYDROGRAPHS AT C70
2368          HC       3

2369          KK     C71
2370          KM        ROUTE FLOW FROM C70 TO C71
2371          RM       1     .98      .2

2372          KK      71
2373          KM        RUNOFF FROM SUBWATERSHED 71
2374          BA     .83
2375          LS       0      72       0
2376          UK     300    .025     .11     100
2377          RK    2100   .0159     .07     .16    TRAP       0      20
2378          RK   10400   .0159     .05            TRAP      25      15

2379          KK     C71
2380          KM        ADD HYDROGRAPHS AT C71
2381          HC       2

2382          KK     C72
2383          KM        ROUTE FLOW FROM C71 TO C72
2384          RM       1     .25      .2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2385          KK     72
2386          KM       RUNOFF FROM SUBWATERSHED 72
2387          BA   2.10
2388          LS      0      78       0
2389          UI      0      72     149     285     472     680     906     961    1084    1084
2390          UI   1084     811     740     640     546     508     427     356     335     260
2391          UI    245     233     222     212     167     139     133     128      69      67
2392          UI     65      63      54      36      35      34      33      32      32      37
2393          UI     17      16      16      15      15      15      14       7       0       0

2394          KK    C72
2395          KM       ADD HYDROGRAPHS AT C72
2396          HC      2

2397          KK    C73
2398          KM       ROUTE FLOW FROM C72 TO C73
2399          RM      1    1.48      .2

2400          KK     73
2401          KM       RUNOFF FROM SUBWATERSHED 73
2402          BA  3.175
2403          LS      0      77       0
2404          UI      0     147     306     586     971    1399    1863    1978    2230    2230
2405          UI   2230    1668    1523    1316    1123    1046     879     732     690     534
2406          UI    503     478     456     436     344     285     274     263     143     138
2407          UI    133     129     112      75      73      71      69      67      65      76
2408          UI     34      33      33      32      31      30      30      15       0       0

2409          KK  SUB57
2410          KM       RUNOFF FROM SUB57
2411          BA   .396
2412          LS      0    83.7
2413          KM  UH6 FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
2414          UI   41.5    41.5    83.1   147.3   215.4   264.5   304.4   343.9   440.2   450.9
2415          UI   302.    258.    237.    215.    197.    177.    162.    139.    120.    105.
2416          UI   98.2    91.3    81.4    68.1    56.3    53.0    46.5    45.4    37.2    31.8
2417          UI   31.8    27.3    20.3    20.3    20.3    20.3    15.9     7.9     7.9     7.9
2418          UI    7.9     7.9     7.9     7.9     7.9     7.9     7.9     7.9     7.9     4.0

2419          KK    C73
2420          KM       ADD HYDROGRAPHS AT C73 (C73, 73 AND SUB57)
2421          HC      3

2422          KK    C74
2423          KM       ROUTE FLOW FROM C73 TO C74
2424          RM      1    1.13      .2

2425          KK  SUB50
2426          KM       RUNOFF FROM SUB50
2427          BA   .102
2428          LS      0      81
2429          UK    175    .026     .20     100
2430          RK   4500    .026     .05                     20      10
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2431        KK   R050
2432        KM       ROUTE SUB50 TO C051
2433        RL                   1.00     2.5
2434        RS      5    FLOW      -1
2435        RC    .05    .045     .05    4500    .016
2436        RX      0       2     100     103     118     121     220     222
2437        RY      6     5.5       5       0       0       5     5.5       6

2438        KK  SUB51
2439        KM       RUNOFF FROM SUB51
2440        BA   .218
2441        LS      0      72
2442        UK    150    .016     .15     100
2443        RK   4500    .016     .05                     50      10

2444        KK   C051
2445        KM       COMBINE SUB51 AND R050
2446        HC      2

2447        KK  SUB52
2448        KM       RUNOFF FROM SUB52
2449        BA  1.212
2450        LS      0    85.6
2451        KM  UHG FROM PHOENIX MOUNTAIN ARIZONA S-GRAPH
2452        UI   98.7    98.7    98.7   253.1   353.2   471.8   592.5   662.5   734.3   801.7
2453        UI   957.   1188.    947.    716.    631.    583.    548.    506.    473.    438.
2454        UI   404.    374.    332.    298.    261.    242.    231.    220.    206.    171.
2455        UI   162.    130.    126.    119.    108.    108.     91.     76.     76.     76.
2456        UI   65.2    48.3    48.3    48.3    48.3    48.3    48.3    21.4    18.9    18.9
2457        UI   18.9    18.9    18.9    18.9    18.9    18.9    18.9    18.9    18.9    18.9
2458        UI   18.9    18.9    18.9    11.5

2459        KK   R052
2460        KM       ROUTE SUB52 THROUGH STRUC.#50, REMAINDER TO #51, 52,AND 53
2461        RS      1    STOR       0
2462        SV      0    .028    .128     .31     .61     1.0     1.3     1.4
2463        SQ      0     198     390     570     769    1084    1377    1430
2464        SE   71.3      73      74      75      76      77    77.6      78

2465        KK  DIV52A
2466        KM       DIVERT(DIV52A) FLOW TO STRUC.#50, REMAINDER TO #51,52 AND53
2467        DT  DIV52B
2468        DI      0     198     390     570     769    1084    1377
2469        DQ      0       0       0       0      34     199     417

2470        KK  DIV52B
2471        KM       RETRIEVE DIV52B
2472        DR  DIV52B
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2473          KK  RO52.1
2474          KM        ROUTE DIV52B THROUGH STRUC.#51,REMAINDER TO #52 AND 53
2475          RS       1    STOR       0
2476          SV       0    .024    .113     .20     .25     .34     .44     .56
2477          SQ       0      19      50      70      90     195     383     637
2478          SE    70.8      72      73    73.7      74    74.5      75    75.5

2479          KK  DIV52C
2480          KM        TAKE RO52.1 FLOW, DIVERT DIV52C TO STRUC.#51, REMAINDER TO STRUC.52/53
2481          DT  DIV52D
2482          DI       0      19      50      70      90     195     383     637
2483          DQ       0       0       0       0      14     105     285     535

2484          KK  DIV52D
2485          KM        RETRIEVE
2486          DR  DIV52D

2487          KK  RO52.2
2488          KM        ROUTE DIV52D THROUGH STRUC. #52,REMAINDER  TO #53
2489          RS       1    STOR       0
2490          SV       0   0.018    .071    .161    .261    .437    .649     .82    1.17
2491          SQ       0      15      52      90     116     179     346   545.5     994
2492          SE      65      66      67      68    68.8    69.9    70.8    71.4    72.4

2493          KK  DIV52E
2494          KM        TAKE RO52.2 FLOW, DIVERT DIV52E TO STRUC.#52, REMAINDER TO STRUC.53
2495          DT  DIV52F
2496          DI       0      15      52      90     116     179     346   545.5     994
2497          DQ       0       0       0       0       0      39     196     383     824

2498          KK  DIV52F
2499          KM        RETRIEVE DIV52F
2500          DR  DIV52F

2501          KK  RO52.3
2502          KM        ROUTE TO STRUC.#53
2503          RS       1    STOR      -1
2504          SV       0     .20     .69    1.37    1.47     2.1     2.3
2505          SQ       0      46      90     107     110     141     483
2506          SE    55.8    58.8    61.3    63.1    63.3    64.4    66.1

2507          KK  DIV52G
2508          KM        DIVERT DIV52G FLOW TO STRUC. #53, REMAINDER TO STRUC.54
2509          DT  DIV52H
2510          DI       0      46      90     107     110     141     483
2511          DQ       0       0       0       0       0      21     353

2512          KK    CO52
2513          KM        COMBINE DIV52A, DIV52C, DIV52E AND DIV52G
2514          HC       4   1.212
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2515          KK   RO52
2516          KM       ROUTE CO52 TO CO53
2517          RL                   1.0    94.9
2518          RS     5   FLOW      -1
2519          RC   .05   .045     .05    4500    .016
2520          RX     0      2      16      22      33      42     103     132
2521          RY  97.0   95.0    94.7    93.8    93.9    95.2    94.7    97.0

2522          KK  SUB54
2523          KM       RUNOFF FROM SUB54
2524          BA  .514
2525          LS     0     72
2526          UK   160   .016      .2     100
2527          RK  4500   .016     .05                    120      10

2528          KK   CO53
2529          KM       COMBINE RO52 AND SUB54
2530          HC     2

2531          KK  SUB53
2532          KM       RUNOFF FROM SUB53
2533          BA  .156
2534          LS     0   82.5
2535          UK   125    .05     .25     100
2536          RK  3000    .05     .05                     15       6

2537          KK DIV52H
2538          KM       RETRIEVE DIV52H
2539          DR DIV52H

2540          KK   CO53
2541          KM       COMBINE DIV52H AND SUB53
2542          HC     2

2543          KK DIV53A
2544          KM       DIVERT (DIV53A) FLOW TO STRUC. #54, REMAINDER TO STRUC. #55
2545          DT DIV53B
2546          DI     0    105     200     240     369     458
2547          DQ     0      0       0       0      89     171

2548          KK   RO53
2549          KM       ROUTE DIV53A TO CO53
2550          RL                  1.00    90.9
2551          RS     3   FLOW      -1
2552          RC   .05   .045     .05    4500    .016
2553          RX     0     18      21      42      68      73      85     110
2554          RY  94.8   93.6    93.1    89.5    89.1    87.9    88.1    93.1

2555          KK DIV53B
2556          KM       RETRIEVE DIV53B
2557          DR DIV53B
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2558          KK   SUB55
2559          KM        RUNOFF FROM SUB55
2560          BA    .064
2561          LS       0      81
2562          UK     100    .025     .25     100
2563          RK    1800    .025     .05                      18       6

2564          KK    C055
2565          KM        COMBINE DIV53B AND SUB55
2566          HC       2

2567          KK    R055
2568          KM        ROUTE C055 TO C056
2569          RL                    1.00    90.9
2570          RS       3    FLOW      -1
2571          RC     .05    .045     .05    4500    .016
2572          RX       0      18      21      42      68      73      85     110
2573          RY    94.8    93.6    93.1    89.5    89.1    87.9    88.1    93.1

2574          KK   SUB56
2575          KM        RUNOFF FROM SUB56
2576          BA    .198
2577          LS       0      72
2578          UK     160   .0167     .20     100
2579          RK    3000   .0167     .05                      60      10

2580          KK    C056
2581          KM        COMBINE SUB56, R053 AND R055
2582          HC       3

2583          KK     C74
2584          KM        ROUTE FLOW FROM C065.1 TO C74
2585          RM       1     .79      .2

2586          KK      74
2587          KM        RUNOFF FROM SUBWATERSHED 74
2588          BA    1.26
2589          LS       0      72       0
2590          UK     350   .0095     .12     100
2591          RK    3500   .0073     .06     .25    TRAP       0      45
2592          RK    8500   .0073     .05            TRAP      25      40

2593          KK     C74
2594          KM        ADD HYDROGRAPHS AT C74 (C74, C056.1 AND 74 C051 AND C74)
2595          HC       5

2596          KK    C76T
2597          KM        ROUTE FLOW AT C74 TO C76T.
2598          RM       1     .31      .2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2599          KK    C76T
2600          KM        ADD HYDROGRAPHS AT C76T.
2601          HC      2
2602          ZZ
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                SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  31          1
              V
              V
  42         C1
              V
              V
  48       C62L
              .
              .
  51          .         62L
              .           .
              .           .
  58       C62L............
              V
              V
  61       C62I
              .
              .
  64          .         62I
              .           .
              .           .
  71       C62I............
              V
              V
  74       C62H
              .
              .
  77          .         62H
              .           .
              .           .
  84          .           .        62J
              .           .          .
              .           .          .
  91       C62H........................
              V
              V
  94       C62K
              .
              .
  97          .           2
              .           V
              .           V
 103          .          C2
              .           V
              .           V
 109          .        C62M
              .           .
              .           .
 112          .           .        62M
              .           .          .
              .           .          .
 119          .        C62M............
                          V
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            .         V
            .         V
122         .       C62K
            .         .
            .         .
125         .         .         3
            .         .         V
            .         .         V
131         .         .        C3
            .         .         V
            .         .         V
137         .         .       C62K
            .         .         .
            .         .         .
140         .         .         .         4
            .         .         .         V
            .         .         .         V
147         .         .         .        C4
            .         .         .         .
            .         .         .         .
155         .         .         .         .-------> DIV4
153         .         .         .        C4
            .         .         .         V
            .         .         .         V
158         .         .         .       C62K
            .         .         .         .
            .         .         .         .
163         .         .         .         .         .<-------   DIV4
161         .         .         .         .        C4
            .         .         .         .         V
            .         .         .         .         V
164         .         .         .         .        C5
            .         .         .         .         .
            .         .         .         .         .
167         .         .         .         .         .         5
            .         .         .         .         .         .
            .         .         .         .         .         .
173         .         .         .         .        C5...........
            .         .         .         .         V
            .         .         .         .         V
176         .         .         .         .        C5
            .         .         .         .         .
            .         .         .         .         .
184         .         .         .         .         .-------> DIV5
182         .         .         .         .        C5
            .         .         .         .         V
            .         .         .         .         V
187         .         .         .         .       C62K
            .         .         .         .         .
            .         .         .         .         .
190       C62K.......................................
            .
            .
195         .         .<-------   DIV5
193         .        C5
            .         V
            .         V
196         .        C6
            .         .
            .         .
199         .         .         6
            .         .         .
            .         .         .
205         .        C6...........
            .         V
            .         V
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208          .          C8
             .           .
             .           .
216          .           .-------> DIV6
214          .          C6
             .           V
             .           V
219          .         C62K
             .           .
             .           .
224          .           .          .<------- DIV6
222          .           .         C6
             .           .          V
             .           .          V
225          .           .         C7
             .           .          .
             .           .          .
228          .           .          .          7
             .           .          .          .
             .           .          .          .
234          .           .         C7............
             .           .          V
             .           .          V
237          .           .         C7
             .           .          .
             .           .          .
245          .           .          .-------> DIV7
243          .           .         C7
             .           .          V
             .           .          V
248          .           .       C62K
             .           .          .
             .           .          .
251          .           .          .        62K
             .           .          .          .
             .           .          .          .
258       C62K...............................
             V
             V
261       C626
             .
             .
266          .           .<------- DIV7
264          .          C7
             .           V
             .           V
267          .          C8
             .           .
             .           .
270          .           .          8
             .           .          .
             .           .          .
276          .          C8............
             .           V
             .           V
279          .          C8
             .           .
             .           .
287          .           .-------> DIV8
285          .          C8
             .           V
             .           V
290          .         C626
             .           .
             .           .
295          .           .          .<------- DIV8
287                                 C8
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273          .          .          C8
             .          .           V
             .          .           V
296          .          .          C9
             .          .           .
             .          .           .
299          .          .           .          9
             .          .           .          .
             .          .           .          .
305          .          .          C9............
             .          .           V
             .          .           V
308          .          .          C9
             .          .           .
             .          .           .
316          .          .           .-------> DIV9
314          .          .          C9
             .          .           V
             .          .           V
319          .          .        C62G
             .          .           .
             .          .           .
322          .          .           .        62G
             .          .           .          .
             .          .           .          .
329       C62G...................................
            V
            V
332       C62E
            .
            .
335          .        62E
             .          .
             .          .
342       C62E............
            .
            .
345          .        10A
             .          V
             .          V
353          .        C10
             .          .
             .          .
358          .          .           .<------- DIV9
356          .          .          C9
             .          .           V
             .          .           V
359          .          .         C10
             .          .           .
             .          .           .
362          .          .           .         10
             .          .           .          .
             .          .           .          .
369          .        C10........................
             .          V
             .          V
372          .        C10
             .          V
             .          V
379          .       C62E
             .          .
             .          .
382          .          .          11
             .          .           .
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389          .          .           .         12
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395       .         .       C11.........
          .         .         V
          .         .         V
398       .         .       C11
          .         .         V
          .         .         V
404       .         .       C62E
          .         .         .
          .         .         .
407       .         .         .        13
          .         .         .         V
          .         .         .         V
414       .         .         .       C13
          .         .         .         V
          .         .         .         V
420       .         .         .       C62E
          .         .         .         .
          .         .         .         .
423     C62E...............................
          .
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426       .        14
          .         V
          .         V
432       .       C62E
          .         .
          .         .
435       .         .        15
          .         .         V
          .         .         V
442       .         .       C15
          .         .         .
          .         .         .
450       .         .         .-------> DIV15
448       .         .       C15
          .         .         V
          .         .         V
453       .         .       C62E
          .         .         .
          .         .         .
456       .         .         .        16
          .         .         .         .
          .         .         .         .
465       .         .         .         .         .<-------  DIV15
463       .         .         .         .       C15
          .         .         .         .         V
          .         .         .         .         V
466       .         .         .         .       C16
          .         .         .         .         .
          .         .         .         .         .
469       .         .         .       C16.........
          .         .         .         V
          .         .         .         V
472       .         .         .       C16
          .         .         .         .
          .         .         .         .
480       .         .         .         .-------> DIV16
478       .         .         .       C16
          .         .         .         V
          .         .         .         V
483       .         .         .       C62E
          .         .         .         .
          .         .         .         .
486       .         .         .         .         17
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494                                                  .<-------  DIV16
492                                                C16
                                                     V
                                                     V
495                                                C17
                                                     .
                                                     .
498                                          C17............
                                               V
                                               V
501                                          C17
                                               .
                                               .
509                                            .------->  DIV17
507                                          C17
                                               V
                                               V
512                                          C62E
                                               .
                                               .
515                                          .
      C62E.........................................
      .
      .
518   .        18
      .         .
      .         .
526   .         .          .<-------  DIV17
524   .         .        C17
      .         .          V
      .         .          V
527   .         .        C18
      .         .          .
      .         .          .
530   .       C18............
      .         V
      .         V
533   .       C18
      .         .
      .         .
541   .         .------->  DIV18
539   .       C18
      .         V
      .         V
544   .       C62E
      .         .
      .         .
547   .         .        19
      .         .          .
      .         .          .
556   .         .          .          .<-------  DIV18
554   .         .          .        C18
      .         .          .          V
      .         .          .          V
557   .         .          .        C19
      .         .          .          .
      .         .          .          .
560   .         .        C19............
      .         .          V
      .         .          V
563   .         .        C19
      .         .          .
      .         .          .
571   .         .          .------->  DIV19
569   .         .        C19
                           V
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                .         .         V
                .         .         V
574             .         .       C62E
                .         .         .
                .         .         .
577             .         .         .        20
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                .         .         .         .
586             .         .         .         .          .<-------   DIV19
584             .         .         .         .        C19
                .         .         .         .          V
                .         .         .         .          V
587             .         .         .         .        C20
                .         .         .         .          .
                .         .         .         .          .
590             .         .         .       C20............
                .         .         .         V
                .         .         .         V
593             .         .         .       C20
                .         .         .         .
                .         .         .         .
601             .         .         .         .------->   DIV20
599             .         .         .       C20
                .         .         .         V
                .         .         .         V
604             .         .         .      C62E
                .         .         .         .
                .         .         .         .
607             .         .         .         .        21
                .         .         .         .         .
                .         .         .         .         .
615             .         .         .         .         .          .<-------   DIV20
613             .         .         .         .         .       C20
                .         .         .         .         .         V
                .         .         .         .         .         V
616             .         .         .         .         .       C21
                .         .         .         .         .         .
                .         .         .         .         .         .
619             .         .         .         .        C21............
                .         .         .         .         V
                .         .         .         .         V
622             .         .         .         .        C21
                .         .         .         .         .
                .         .         .         .         .
630             .         .         .         .         .------->   DIV21
628             .         .         .         .        C21
                .         .         .         .         V
                .         .         .         .         V
633             .         .         .         .       C62E
                .         .         .         .         .
                .         .         .         .         .
636          C62E.........................................
                .
                .
639             .       62F
                .         .
                .         .
646          C62E............
                V
                V
649          C62D
                .
                .
652             .       62D
                .         .
                .         .
658          C62D
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657        C62B............
             V
             V
662        C62B
             .
             .
665          .        62B
             .          .
             .          .
672          .          .        62C
             .          .          .
             .          .          .
679        C62B......................
             V
             V
682        C62
             .
             .
685          .        62A
             .          V
             .          V
692          .        C62
             .          .
             .          .
695          .          .         62
             .          .          .
             .          .          .
702        C62......................
             V
             V
705        C62
             V
             V
711        C83T
             .
             .
714          .        83T
             .          .
             .          .
721        C83T............
             .
             .
726          .          .<-------   DIV21
724          .        C21
             .          V
             .          V
727          .        C22
             .          .
             .          .
730          .          .         22
             .          .          .
             .          .          .
736          .        C22............
             .          V
             .          V
739          .        C22
             .          .
             .          .
747          .          .------->   DIV22
745          .        C22
             .          V
             .          V
750          .        C63B
             .          .
             .          .
755          .          .          .<-------   DIV22
757                     C22
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755          .          .        C22
             .          .         V
             .          .         V
756          .          .        C23
             .          .         .
             .          .         .
759          .          .         .          23
             .          .         .           .
             .          .         .           .
765          .          .        C23............
             .          .         V
             .          .         V
768          .          .        C23
             .          .         .
             .          .         .
776          .          .         .-------> DIV23
774          .          .        C23
             .          .         V
             .          .         V
779          .          .       C63B
             .          .         .
             .          .         .
784          .          .         .         .<-------  DIV23
782          .          .         .       C23
             .          .         .         V
             .          .         .         V
785          .          .         .       C24
             .          .         .         .
             .          .         .         .
788          .          .         .         .          24
             .          .         .         .           .
             .          .         .         .           .
794          .          .         .       C24............
             .          .         .         V
             .          .         .         V
797          .          .         .       C24
             .          .         .         .
             .          .         .         .
805          .          .         .         .-------> DIV24
803          .          .         .       C24
             .          .         .         V
             .          .         .         V
808          .          .         .       C63B
             .          .         .         .
             .          .         .         .
813          .          .         .         .          .<-------  DIV24
811          .          .         .         .        C24
             .          .         .         .         V
             .          .         .         .         V
814          .          .         .         .        C25
             .          .         .         .         .
             .          .         .         .         .
817          .          .         .         .         .          25
             .          .         .         .         .           .
             .          .         .         .         .           .
823          .          .         .         .        C25............
             .          .         .         .         V
             .          .         .         .         V
826          .          .         .         .        C25
             .          .         .         .         .
             .          .         .         .         .
834          .          .         .         .         .-------> DIV25
832          .          .         .         .        C25
             .          .         .         .         V
             .          .         .         .         V
837          .          .         .         .       C63B
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840          C63B...............................
843                  26B
                      V
                      V
852                  C26A
                      .
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855                   .          26A
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2109            .         .         .         .         .-------> DIV42B
2107            .         .         .         .    DIV42A
                .         .         .         .         .
                .         .         .         .         .
2112            .         .         .    C042.1............
                .         .         .         V
                .         .         .         V
2115            .         .         .    R041.1
                .         .         .         .
                .         .         .         .
2123            .         .         .         .         .<------- DIV42B
2121            .         .         .         .    DIV42B
                .         .         .         .         .
                .         .         .         .         .
2126            .         .         .         .         .-------> DIV42D
2124            .         .         .         .    DIV42C
                .         .         .         .         V
                .         .         .         .         V
2129            .         .         .         .      R042
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2129          .          .          .          .        R042
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2135          .          .        C042.......................
              .          .          V
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2138          .          .        R042
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2145          .          .          .       SUB43
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2151          .          .        C043............
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2154          .          .          .         82T
              .          .          .          .
              .          .          .          .
2161          .        C81T........................
              .          V
              .          V
2164          .        C78T
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2167          .          .         78T
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2174        C78T........................
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2179          .          .<-------  DIV42D
2177          .      DIV42D
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2180          .          .       SUB44
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              .          .          .
2186          .        C044............
              .          V
              .          V
2189          .        R044
              .          .
              .          .
2196          .          .       SUB45
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              .          .          .
2202          .        C045............
              .          .
              .          .
2205          .          .       SUB47
              .          .          .
              .          .          .
2211          .        C047............
              .          .
              .          .
2214        C78T............
              V
              V
2217        C76T
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2220          .         79T
              .          V
              .          V
2227          .        C76T
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2230        C76T............
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2233            .       SUB46
                .          V
                .          V
2243            .       RO46
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2250            .           .       SUB48
                .           .          V
                .           .          V
2256            .           .       RO48
                .           .           .
                .           .           .
2263            .           .           .       SUB49
                .           .           .          .
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2269            .       CO49.......................
                .          V
                .          V
2272            .       C76T
                .           .
                .           .
2275        C76T............
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                .
2278            .        76T
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2285        C76T............
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2288            .         66
                .          V
                .          V
2295            .        C67
                .           .
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2298            .           .          67
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2310            .        C67............
                .          V
                .          V
2313            .        C68
                .           .
                .           .
2316            .           .          68
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2326            .        C68............
                .          V
                .          V
2329            .        C69
                .           .
                .           .
2332            .           .          69
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2339            .        C69............
                .          V
                .          V
2342            .        C70
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2345        .         .        70A
            .         .         V
            .         .         V
2356        .         .        C70
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2359        .         .         .         70
            .         .         .          .
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2366        .       C70.......................
            .         V
            .         V
2369        .       C71
            .         .
            .         .
2372        .         .         71
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            .         .         .
2379        .       C71............
            .         V
            .         V
2382        .       C72
            .         .
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2385        .         .         72
            .         .         .
            .         .         .
2394        .       C72............
            .         V
            .         V
2397        .       C73
            .         .
            .         .
2400        .         .         73
            .         .         .
            .         .         .
2409        .         .         .       SUB57
            .         .         .          .
            .         .         .          .
2419        .       C73.......................
            .         V
            .         V
2422        .       C74
            .         .
            .         .
2425        .         .       SUB50
            .         .         V
            .         .         V
2431        .         .       RO50
            .         .         .
            .         .         .
2438        .         .         .       SUB51
            .         .         .          .
            .         .         .          .
2444        .         .       CO51............
            .         .         .
            .         .         .
2447        .         .         .       SUB52
            .         .         .          V
            .         .         .          V
2459        .         .         .       RO52
            .         .         .          .
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2467        .         .         .          .-------> DIV52B
2465        .         .         .      DIV52A
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2472            .         .         .         .<------- DIV52B
2470            .         .         .      DIV52B
                .         .         .         V
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2473            .         .         .      R052.1
                .         .         .         .
                .         .         .         .
2481            .         .         .         .-------> DIV52D
2479            .         .         .      DIV52C
                .         .         .         .
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2486            .         .         .         .         .<------- DIV52D
2484            .         .         .         .      DIV52D
                .         .         .         .         V
                .         .         .         .         V
2487            .         .         .         .      R052.2
                .         .         .         .         .
                .         .         .         .         .
2495            .         .         .         .         .-------> DIV52F
2493            .         .         .         .      DIV52E
                .         .         .         .         .
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2500            .         .         .         .         .         .<------- DIV52F
2498            .         .         .         .         .      DIV52F
                .         .         .         .         .         V
                .         .         .         .         .         V
2501            .         .         .         .         .      R052.3
                .         .         .         .         .         .
                .         .         .         .         .         .
2509            .         .         .         .         .         .-------> DIV52H
2507            .         .         .         .         .      DIV52G
                .         .         .         .         .         .
                .         .         .         .         .         .
2512            .         .         .      C052.................................
                .         .         .         V
                .         .         .         V
2515            .         .         .      R052
                .         .         .         .
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2522            .         .         .         .      SUB54
                .         .         .         .         .
                .         .         .         .         .
2528            .         .         .      C053............
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2531            .         .         .         .      SUB53
                .         .         .         .         .
                .         .         .         .         .
2539            .         .         .         .         .         .<------- DIV52H
2537            .         .         .         .         .      DIV52H
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2540            .         .         .         .       C053............
                .         .         .         .         .
                .         .         .         .         .
2545            .         .         .         .         .-------> DIV53B
2543            .         .         .         .      DIV53A
                .         .         .         .         V
                .         .         .         .         V
2548            .         .         .         .       R053
                .         .         .         .         .
                .         .         .         .         .
2557            .         .         .         .         .         .<------- DIV53B
2555            .         .         .         .         .      DIV53B
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2558            .         .         .         .         .         .        SUB55
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                .         .         .         .         .         .          .
2564            .         .         .         .         .       C055.........
                .         .         .         .         .         V
                .         .         .         .         .         V
2567            .         .         .         .         .       R055
                .         .         .         .         .         .
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2574            .         .         .         .         .         .        SUB56
                .         .         .         .         .         .          .
                .         .         .         .         .         .          .
2580            .         .         .         .       C056.......................
                .         .         .         .         V
                .         .         .         .         V
2583            .         .         .         .       C74
                .         .         .         .         .
                .         .         .         .         .
2586            .         .         .         .         .        74
                .         .         .         .         .         .
                .         .         .         .         .         .
2593            .       C74.........................................
                .         V
                .         V
2596            .       C76T
                .         .
                .         .
2599         C76T............
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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*************************************
*                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1) *
*           FEBRUARY 1981           *
*         REVISED 14 JUN 85         *
*                                   *
*      RUN DATE: 02/26/1991         *
*          TIME: 10:43:59.31        *
*                                   *
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
* THE HYDROLOGIC ENGINEERING CENTER *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*                                   *
* (916) 551-1748 OR (FTS) 448-3285  *
*                                   *
*************************************
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                    WTM100YR                                    FILE:WTM100Y2.DAT

                    THIS IS THE HEC-1 COMPUTER MODEL FOR THE WITTMANN AREA DRAINAGE MASTER
                    STUDY.  THIS STUDY IS PREPARED FOR THE FLOOD CONTROL DISTRICT OF
                    MARICOPA COUNTY BY THE WLB GROUP, INC.

                    THIS IS THE 100 YEAR MODEL FOR THE STUDY AREA AND INCLUDES STORAGE
                    ROUTING AND DIVERSIONS ALONG THE A.T. & S.F. RAILROAD, THE CAP CANAL,
                    AND THE BEARDSLEY CANAL.

                    MODIFIED BY A-N WEST TO INCORPORATE SUN VALLEY PARKWAY NORTH FIS
                    HYDROLOGY ;DATE 11\26\90  REVISED 2\26\91

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

   IT         HYDROGRAPH TIME DATA
                    NMIN          3  MINUTES IN COMPUTATION INTERVAL
                   IDATE    26JAN87  STARTING DATE
                   ITIME       1200  STARTING TIME
                      NQ        640  NUMBER OF HYDROGRAPH ORDINATES
                  NDDATE    27JAN87  ENDING DATE
                  NDTIME       1957  ENDING TIME

              COMPUTATION INTERVAL    0.05 HOURS
                   TOTAL TIME BASE   31.95 HOURS

        ENGLISH UNITS
            DRAINAGE AREA         SQUARE MILES
            PRECIPITATION DEPTH   INCHES
            LENGTH, ELEVATION     FEET
            FLOW                  CUBIC FEET PER SECOND
            STORAGE VOLUME        ACRE-FEET
            SURFACE AREA          ACRES
            TEMPERATURE           DEGREES FAHRENHEIT

 16 JD         INDEX STORM NO. 1
                   STRM       4.21  PRECIPITATION DEPTH
                   TRDA       0.00  TRANSPOSITION DRAINAGE AREA

 17 PI           PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

27 JD INDEX STORM NO. 2

STRM 4.17 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

28 JD INDEX STORM NO. 3

STRM 4.00 PRECIPITATION DEPTH

TRDA 50.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

29 JD INDEX STORM NO. 4

STRM 3.93 PRECIPITATION DEPTH

TRDA 100.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

30 JD INDEX STORM NO. 5

STRM 3.82 PRECIPITATION DEPTH

TRDA 350.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0 TO 17440

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 19440.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 345. TO 588.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 707.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 7200.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 85.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 27.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 225.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 2844. TO 3370.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 106.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1800.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 19.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 107.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 6298. TO 13176.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2102.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1637.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 345. TO 15343.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 2844. TO 3370.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 340.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 100.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 60.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2730.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2645.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1829.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 329.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 144.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 1034. TO 1302.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2664.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 576.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 312.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1981.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 2376.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 12.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 277. TO 866.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 1470.

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO [illegible]
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 637.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 994.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 141. TO 483.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	1	134.	12.10	17.	5.	4.	0.09		
ROUTED TO	C1	83.	12.25	17.	5.	4.	0.09	1972.99	12.35
ROUTED TO	C62L	47.	12.80	17.	5.	4.	0.09		
HYDROGRAPH AT	62L	356.	12.25	62.	19.	14.	0.36		
2 COMBINED AT	C62L	372.	12.30	79.	24.	18.	0.45		
ROUTED TO	C62I	210.	12.80	78.	24.	18.	0.45		
HYDROGRAPH AT	62I	403.	12.55	98.	31.	23.	0.54		
2 COMBINED AT	C62I	591.	12.60	175.	55.	41.	0.99		
ROUTED TO	C62H	433.	13.10	173.	55.	41.	0.99		
HYDROGRAPH AT	62H	422.	12.50	103.	32.	24.	0.55		
HYDROGRAPH AT	62J	442.	12.75	139.	44.	33.	0.88		
3 COMBINED AT	C62H	1122.	12.75	412.	131.	99.	2.42		
ROUTED TO	C62K	1103.	12.90	411.	131.	99.	2.42		
HYDROGRAPH AT	2	332.	12.40	85.	27.	20.	0.50		
ROUTED TO	C2	325.	12.50	85.	27.	20.	0.50	1968.97	12.55
ROUTED TO	C62M	281.	12.80	85.	27.	20.	0.50		
HYDROGRAPH AT	62M	150.	12.30	30.	9.	7.	0.24		
2 COMBINED AT	C62M	353.	12.65	114.	36.	27.	0.74		
ROUTED TO	C62K	236.	13.45	111.	36.	27.	0.74		
HYDROGRAPH AT	3	303.	12.30	67.	21.	16.	0.35		
ROUTED TO	C3	301.	12.30	67.	21.	16.	0.35	1968.34	12.35
ROUTED TO	C62K	129.	13.15	65.	21.	16.	0.35		
HYDROGRAPH AT	4	374.	12.65	116.	37.	27.	0.65		
ROUTED TO	C4	374.	12.65	116.	37.	27.	0.65	1966.58	12.75
DIVERSION TO	DIV4	283.	12.65	56.	14.	10.	0.65		
HYDROGRAPH AT	C4	91.	12.65	60.	23.	17.	0.65		

ROUTED TO	C62K	66.	15.25	53.	23.	17.	0.65		
HYDROGRAPH AT	C4	283.	12.65	56.	14.	10.	0.65		
ROUTED TO	C5	268.	12.85	56.	14.	10.	0.65		
HYDROGRAPH AT	5	337.	12.15	59.	18.	14.	0.35		
2 COMBINED AT	C5	375.	12.65	115.	32.	24.	0.35		
ROUTED TO	C5	364.	12.85	115.	32.	24.	0.35	1947.99	13.05
DIVERSION TO	DIV5	169.	12.85	24.	6.	4.	0.35		
HYDROGRAPH AT	C5	195.	12.85	91.	26.	20.	0.35		
ROUTED TO	C62K	158.	14.65	88.	26.	20.	0.35		
5 COMBINED AT	C62K	1520.	13.00	720.	236.	178.	4.51		
HYDROGRAPH AT	C5	169.	12.85	24.	6.	4.	0.35		
ROUTED TO	C6	160.	13.05	24.	6.	4.	0.35		
HYDROGRAPH AT	6	58.	12.05	6.	2.	1.	0.03		
2 COMBINED AT	C6	168.	13.05	30.	8.	6.	0.03		
ROUTED TO	C6	167.	13.10	30.	8.	6.	0.03	1947.73	13.35
DIVERSION TO	DIV6	136.	13.10	20.	5.	4.	0.03		
HYDROGRAPH AT	C6	31.	13.10	10.	3.	2.	0.03		
ROUTED TO	C62K	16.	14.20	9.	3.	2.	0.03		
HYDROGRAPH AT	C6	136.	13.10	20.	5.	4.	0.03		
ROUTED TO	C7	134.	13.15	20.	5.	4.	0.03		
HYDROGRAPH AT	7	57.	12.15	8.	2.	2.	0.04		
2 COMBINED AT	C7	141.	13.15	28.	7.	6.	0.04		
ROUTED TO	C7	77.	13.60	28.	7.	6.	0.04	1942.63	13.75
DIVERSION TO	DIV7	0.	0.05	0.	0.	0.	0.04		
HYDROGRAPH AT	C7	77.	13.60	28.	7.	6.	0.04		
ROUTED TO	C62K	52.	14.65	26.	7.	6.	0.04		
HYDROGRAPH AT	62K	532.	13.05	207.	68.	51.	1.40		
4 COMBINED AT	C62K	2064.	13.05	960.	314.	236.	5.98		
ROUTED TO	C62G	1848.	13.55	950.	314.	236.	5.98		
HYDROGRAPH AT	C7	0.	0.05	0.	0.	0.	0.04		
ROUTED TO	C8	0.	0.05	0.	0.	0.	0.04		
HYDROGRAPH AT	8	19.	12.05	2.	1.	0.	0.01		
2 COMBINED AT	C8	19.	12.05	2.	1.	0.	0.01		

ROUTED TO	C8	12.	12.15	2.	1.	0.	0.01	1940.02	12.15
DIVERSION TO	DIV8	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	C8	12.	12.15	2.	1.	0.	0.01		
ROUTED TO	C626	2.	13.45	2.	1.	0.	0.01		
HYDROGRAPH AT	C8	0.	0.05	0.	0.	0.	0.01		
ROUTED TO	C9	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	9	87.	12.20	15.	5.	4.	0.08		
2 COMBINED AT	C9	87.	12.20	15.	5.	4.	0.08		
ROUTED TO	C9	84.	12.25	15.	5.	4.	0.08	1933.53	12.30
DIVERSION TO	DIV9	59.	12.25	6.	2.	1.	0.08		
HYDROGRAPH AT	C9	25.	12.25	9.	3.	2.	0.08		
ROUTED TO	C626	9.	14.75	8.	3.	2.	0.08		
HYDROGRAPH AT	626	874.	12.85	303.	98.	73.	1.86		
4 COMBINED AT	C626	2470.	13.30	1248.	415.	312.	7.93		
ROUTED TO	C62E	2354.	13.70	1241.	415.	312.	7.93		
HYDROGRAPH AT	62E	345.	12.80	111.	36.	27.	0.68		
2 COMBINED AT	C62E	2520.	13.60	1343.	450.	338.	8.61		
HYDROGRAPH AT	10A	1788.	12.25	314.	97.	73.	4.94		
ROUTED TO	C10	724.	12.95	312.	97.	73.	4.94		
HYDROGRAPH AT	C9	59.	12.25	6.	2.	1.	0.08		
ROUTED TO	C10	54.	12.40	6.	2.	1.	0.08		
HYDROGRAPH AT	10	1635.	12.95	652.	213.	160.	3.93		
3 COMBINED AT	C10	2371.	12.95	967.	311.	234.	8.87		
ROUTED TO	C10	2372.	12.95	967.	311.	234.	8.87	1922.46	13.00
ROUTED TO	C62E	1588.	14.00	930.	311.	233.	8.87		
HYDROGRAPH AT	11	203.	12.25	38.	12.	9.	0.20		
HYDROGRAPH AT	12	4.	12.05	0.	0.	0.	0.00		
2 COMBINED AT	C11	204.	12.25	38.	12.	9.	0.20		
ROUTED TO	C11	79.	12.75	38.	12.	9.	0.20	1920.02	12.75
ROUTED TO	C62E	46.	15.25	33.	12.	9.	0.20		
HYDROGRAPH AT	13	108.	12.25	19.	6.	4.	0.10		
ROUTED TO	C13	87.	12.40	19.	6.	4.	0.10	1909.53	12.45
ROUTED TO	C62E	26.	13.60	17.	6.	4.	0.10		

4 COMBINED AT	C62E	3995.	13.80	2255.	760.	571.	17.78		
HYDROGRAPH AT	14	20.	12.05	2.	1.	0.	0.01		
ROUTED TO	C62E	2.	13.25	2.	1.	0.	0.01		
HYDROGRAPH AT	15	435.	12.45	106.	33.	25.	0.57		
ROUTED TO	C15	244.	12.95	105.	33.	25.	0.57	1906.58	13.00
DIVERSION TO	DIV15	29.	12.95	4.	1.	1.	0.57		
HYDROGRAPH AT	C15	215.	12.95	101.	32.	24.	0.57		
ROUTED TO	C62E	138.	14.65	93.	32.	24.	0.57		
HYDROGRAPH AT	16	479.	12.40	115.	36.	27.	0.62		
HYDROGRAPH AT	C15	29.	12.95	4.	1.	1.	0.57		
ROUTED TO	C16	28.	13.05	4.	1.	1.	0.57		
2 COMBINED AT	C16	479.	12.40	119.	37.	28.	0.62		
ROUTED TO	C16	409.	12.60	119.	37.	28.	0.62	1903.68	12.75
DIVERSION TO	DIV16	295.	12.60	38.	9.	7.	0.62		
HYDROGRAPH AT	C16	114.	12.60	81.	28.	21.	0.62		
ROUTED TO	C62E	84.	16.45	70.	28.	21.	0.62		
HYDROGRAPH AT	17	84.	12.10	10.	3.	2.	0.05		
HYDROGRAPH AT	C16	295.	12.60	38.	9.	7.	0.62		
ROUTED TO	C17	292.	12.65	38.	9.	7.	0.62		
2 COMBINED AT	C17	309.	12.65	48.	12.	9.	0.05		
ROUTED TO	C17	285.	12.75	48.	12.	9.	0.05	1901.46	13.00
DIVERSION TO	DIV17	184.	12.75	15.	4.	3.	0.05		
HYDROGRAPH AT	C17	101.	12.75	33.	9.	7.	0.05		
ROUTED TO	C62E	62.	14.40	31.	9.	7.	0.05		
5 COMBINED AT	C62E	4199.	13.80	2433.	825.	620.	19.03		
HYDROGRAPH AT	18	70.	12.10	8.	2.	2.	0.04		
HYDROGRAPH AT	C17	184.	12.75	15.	4.	3.	0.05		
ROUTED TO	C18	170.	12.85	15.	4.	3.	0.05		
2 COMBINED AT	C18	179.	12.85	23.	6.	5.	0.04		
ROUTED TO	C18	106.	13.15	23.	6.	5.	0.04	1890.94	13.25
DIVERSION TO	DIV18	58.	13.15	9.	2.	2.	0.04		
HYDROGRAPH AT	C18	47.	13.15	14.	4.	3.	0.04		
ROUTED TO	C62E	19.	14.35	12.	4.	3.	0.04		

HYDROGRAPH AT	19	123.	12.35	26.	8.	6.	0.14		
HYDROGRAPH AT	C18	58.	13.15	9.	2.	2.	0.04		
ROUTED TO	C19	58.	13.15	9.	2.	2.	0.04		
2 COMBINED AT	C19	132.	12.35	35.	10.	8.	0.14		
ROUTED TO	C19	78.	13.55	35.	10.	8.	0.14	1890.21	12.75
DIVERSION TO	DIV19	0.	0.05	0.	0.	0.	0.14		
HYDROGRAPH AT	C19	78.	13.55	35.	10.	8.	0.14		
ROUTED TO	C62E	56.	14.85	32.	10.	8.	0.14		
HYDROGRAPH AT	20	422.	12.55	124.	39.	30.	0.70		
HYDROGRAPH AT	C19	0.	0.05	0.	0.	0.	0.14		
ROUTED TO	C20	0.	0.05	0.	0.	0.	0.14		
2 COMBINED AT	C20	422.	12.55	124.	39.	30.	0.70		
ROUTED TO	C20	420.	12.60	124.	39.	30.	0.70	1890.00	12.65
DIVERSION TO	DIV20	215.	12.60	26.	6.	5.	0.70		
HYDROGRAPH AT	C20	205.	12.60	99.	33.	25.	0.70		
ROUTED TO	C62E	138.	14.25	91.	33.	25.	0.70		
HYDROGRAPH AT	21	24.	12.10	3.	1.	1.	0.02		
HYDROGRAPH AT	C20	215.	12.60	26.	6.	5.	0.70		
ROUTED TO	C21	212.	12.65	26.	6.	5.	0.70		
2 COMBINED AT	C21	220.	12.65	29.	7.	6.	0.02		
ROUTED TO	C21	219.	12.70	29.	7.	6.	0.02	1888.74	12.75
DIVERSION TO	DIV21	200.	12.70	24.	6.	4.	0.02		
HYDROGRAPH AT	C21	19.	12.70	5.	1.	1.	0.02		
ROUTED TO	C62E	7.	14.05	4.	1.	1.	0.02		
5 COMBINED AT	C62E	4378.	13.85	2561.	870.	654.	19.93		
HYDROGRAPH AT	62F	805.	13.10	330.	110.	82.	2.18		
2 COMBINED AT	C62E	4915.	13.75	2854.	972.	730.	22.11		
ROUTED TO	C62D	4898.	13.85	2851.	972.	730.	22.11		
HYDROGRAPH AT	62D	790.	13.00	302.	98.	74.	1.66		
2 COMBINED AT	C62D	5360.	13.75	3113.	1063.	799.	23.77		
ROUTED TO	C62B	5239.	14.10	3098.	1063.	798.	23.77		
HYDROGRAPH AT	62B	194.	12.75	67.	22.	16.	0.49		
HYDROGRAPH AT	62C	296.	12.45	75.	23.	18.	0.40		

3 COMBINED AT	C62B	5350.	14.05	3190.	1104.	829.	24.66		
ROUTED TO	C62	4294.	15.35	3038.	1099.	826.	24.66		
HYDROGRAPH AT	62A	744.	12.90	287.	92.	69.	1.58		
ROUTED TO	C62	393.	14.25	260.	92.	69.	1.58		
HYDROGRAPH AT	62	1412.	13.80	713.	247.	185.	5.09		
3 COMBINED AT	C62	5309.	15.05	3829.	1410.	1059.	31.33		
ROUTED TO	C62	5001.	15.75	3313.	1375.	1032.	31.33	1552.35	15.95
ROUTED TO	C83T	4114.	17.15	3188.	1353.	1017.	31.33		
HYDROGRAPH AT	83T	317.	13.85	174.	60.	45.	1.29		
2 COMBINED AT	C83T	4187.	17.15	3252.	1408.	1058.	32.62		
HYDROGRAPH AT	C21	200.	12.70	24.	6.	4.	0.02		
ROUTED TO	C22	190.	12.80	24.	6.	4.	0.02		
HYDROGRAPH AT	22	153.	12.40	34.	11.	8.	0.26		
2 COMBINED AT	C22	276.	12.75	58.	17.	13.	0.26		
ROUTED TO	C22	273.	12.80	58.	17.	13.	0.26	1878.66	12.90
DIVERSION TO	DIV22	193.	12.80	22.	6.	4.	0.26		
HYDROGRAPH AT	C22	80.	12.80	35.	11.	8.	0.26		
ROUTED TO	C63B	56.	14.50	33.	11.	8.	0.26		
HYDROGRAPH AT	C22	193.	12.80	22.	6.	4.	0.26		
ROUTED TO	C23	192.	12.85	22.	6.	4.	0.26		
HYDROGRAPH AT	23	8.	12.05	1.	0.	0.	0.01		
2 COMBINED AT	C23	198.	12.85	24.	6.	5.	0.01		
ROUTED TO	C23	198.	12.85	24.	6.	5.	0.01	1871.93	12.95
DIVERSION TO	DIV23	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	C23	198.	12.85	24.	6.	5.	0.01		
ROUTED TO	C63B	92.	13.45	24.	6.	5.	0.01		
HYDROGRAPH AT	C23	0.	0.05	0.	0.	0.	0.01		
ROUTED TO	C24	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	24	8.	12.05	1.	0.	0.	0.01		
2 COMBINED AT	C24	8.	12.05	1.	0.	0.	0.01		
ROUTED TO	C24	3.	12.20	1.	0.	0.	0.01	1870.89	12.25
DIVERSION TO	DIV24	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	C24	3.	12.20	1.	0.	0.	0.01		

ROUTED TO	C63B	1.	13.40	1.	0.	0.	0.01		
HYDROGRAPH AT	C24	0.	0.05	0.	0.	0.	0.01		
ROUTED TO	C25	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	25	51.	12.15	7.	2.	2.	0.05		
2 COMBINED AT	C25	51.	12.15	7.	2.	2.	0.05		
ROUTED TO	C25	41.	12.25	7.	2.	2.	0.05	1862.60	12.30
DIVERSION TO	DIV25	9.	12.25	0.	0.	0.	0.05		
HYDROGRAPH AT	C25	32.	12.25	6.	2.	2.	0.05		
ROUTED TO	C63B	10.	13.35	6.	2.	2.	0.05		
4 COMBINED AT	C63B	144.	13.55	63.	19.	14.	0.32		
HYDROGRAPH AT	26B	4685.	12.25	882.	275.	206.	12.72		
ROUTED TO	C26A	3254.	12.60	880.	275.	206.	12.72		
HYDROGRAPH AT	26A	812.	12.20	125.	38.	29.	2.26		
2 COMBINED AT	C26A	3550.	12.55	997.	311.	233.	14.98		
ROUTED TO	C26	2629.	13.15	993.	311.	233.	14.98		
HYDROGRAPH AT	C25	9.	12.25	0.	0.	0.	0.05		
ROUTED TO	C26	8.	12.35	0.	0.	0.	0.05		
HYDROGRAPH AT	26	363.	13.05	149.	50.	37.	1.12		
3 COMBINED AT	C26	2970.	13.15	1135.	359.	269.	16.10		
ROUTED TO	C26	2970.	13.15	1135.	359.	269.	16.10	1856.34	13.15
ROUTED TO	C63B	2599.	13.65	1131.	359.	269.	16.10		
HYDROGRAPH AT	27	53.	12.20	8.	2.	2.	0.06		
ROUTED TO	C27	51.	12.25	8.	2.	2.	0.06	1849.12	12.30
DIVERSION TO	DIV27	23.	12.25	1.	0.	0.	0.06		
HYDROGRAPH AT	C27	28.	12.25	7.	2.	2.	0.06		
ROUTED TO	C63B	12.	13.40	7.	2.	2.	0.06		
HYDROGRAPH AT	63B	971.	12.50	265.	83.	63.	1.44		
4 COMBINED AT	C63B	3035.	13.60	1439.	459.	345.	17.92		
ROUTED TO	C63C	2928.	13.90	1434.	459.	345.	17.92		
HYDROGRAPH AT	C27	23.	12.25	1.	0.	0.	0.06		
ROUTED TO	C28	12.	12.40	1.	0.	0.	0.06		
HYDROGRAPH AT	28	176.	12.35	35.	11.	8.	0.24		
2 COMBINED AT	C28	188.	12.35	36.	11.	8.	0.24		

ROUTED TO	C28	168.	12.45	36.	11.	8.	0.24	1825.64	12.50
DIVERSION TO	DIV28	99.	12.45	8.	2.	1.	0.24		
HYDROGRAPH AT	C28	70.	12.45	28.	9.	7.	0.24		
ROUTED TO	C63C	26.	14.80	21.	9.	7.	0.24		
HYDROGRAPH AT	C28	99.	12.45	8.	2.	1.	0.24		
ROUTED TO	C29	97.	12.50	8.	2.	1.	0.24		
HYDROGRAPH AT	29	20.	12.05	2.	1.	0.	0.01		
2 COMBINED AT	C29	102.	12.50	10.	3.	2.	0.01		
ROUTED TO	C29	98.	12.55	10.	3.	2.	0.01	1823.16	12.65
DIVERSION TO	DIV29	67.	12.55	4.	1.	1.	0.01		
HYDROGRAPH AT	C29	31.	12.55	6.	2.	1.	0.01		
ROUTED TO	C63C	7.	14.20	5.	2.	1.	0.01		
HYDROGRAPH AT	C29	67.	12.55	4.	1.	1.	0.01		
ROUTED TO	C30	67.	12.60	4.	1.	1.	0.01		
HYDROGRAPH AT	30	20.	12.05	2.	1.	0.	0.01		
2 COMBINED AT	C30	69.	12.60	6.	2.	1.	0.01		
ROUTED TO	C30	50.	12.75	6.	2.	1.	0.01	1824.39	12.80
DIVERSION TO	DIV30	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	C30	50.	12.75	6.	2.	1.	0.01		
ROUTED TO	C63C	9.	13.45	5.	2.	1.	0.01		
HYDROGRAPH AT	C30	0.	0.05	0.	0.	0.	0.01		
ROUTED TO	C31	0.	0.05	0.	0.	0.	0.01		
HYDROGRAPH AT	31	288.	12.85	99.	32.	24.	0.63		
2 COMBINED AT	C31	288.	12.85	99.	32.	24.	0.63		
ROUTED TO	C31	240.	13.20	99.	32.	24.	0.63	1809.70	13.35
DIVERSION TO	DIV31	16.	13.20	1.	0.	0.	0.63		
HYDROGRAPH AT	C31	224.	13.20	98.	32.	24.	0.63		
ROUTED TO	C63C	122.	14.95	85.	32.	24.	0.63		
5 COMBINED AT	C63C	3039.	13.95	1530.	500.	376.	18.81		
HYDROGRAPH AT	C31	16.	13.20	1.	0.	0.	0.63		
ROUTED TO	C32	13.	13.30	1.	0.	0.	0.63		
HYDROGRAPH AT	32	66.	12.15	10.	3.	2.	0.05		
2 COMBINED AT	C32	66.	12.15	10.	3.	2.	0.05		

ROUTED TO	C32	46.	12.35	10.	3.	2.	0.05	1800.82	12.35
DIVERSION TO	DIV32	4.	12.35	0.	0.	0.	0.05		
HYDROGRAPH AT	C32	42.	12.35	10.	3.	2.	0.05		
ROUTED TO	C63C	12.	14.10	8.	3.	2.	0.05		
HYDROGRAPH AT	C32	4.	12.35	0.	0.	0.	0.05		
ROUTED TO	C33	3.	12.40	0.	0.	0.	0.05		
HYDROGRAPH AT	33	41.	12.05	4.	1.	1.	0.02		
2 COMBINED AT	C33	41.	12.05	4.	1.	1.	0.02		
ROUTED TO	C33	14.	12.20	4.	1.	1.	0.02	1789.66	12.25
DIVERSION TO	DIV33	0.	0.05	0.	0.	0.	0.02		
HYDROGRAPH AT	C33	14.	12.20	4.	1.	1.	0.02		
ROUTED TO	C63C	4.	14.65	3.	1.	1.	0.02		
HYDROGRAPH AT	63C	1300.	12.45	337.	106.	79.	1.70		
4 COMBINED AT	C63C	3322.	13.85	1846.	605.	454.	20.58		
ROUTED TO	C63	2789.	14.80	1774.	604.	454.	20.58		
HYDROGRAPH AT	63A	1088.	13.15	427.	141.	106.	2.67		
ROUTED TO	C63	775.	13.95	414.	140.	105.	2.67		
HYDROGRAPH AT	63	975.	13.25	436.	145.	109.	2.78		
3 COMBINED AT	C63	3851.	14.45	2543.	872.	655.	26.03		
ROUTED TO	C63	3845.	14.55	2542.	872.	655.	26.03	1548.87	14.60
ROUTED TO	C83T	3130.	16.05	2345.	867.	651.	26.03		
HYDROGRAPH AT	84T	348.	14.75	218.	80.	60.	1.81		
2 COMBINED AT	C83T	3362.	15.90	2530.	941.	707.	27.84		
2 COMBINED AT	C83T	6965.	16.75	5349.	2280.	1713.	60.46		
ROUTED TO	C78T	6923.	17.05	5340.	2274.	1708.	60.46		
HYDROGRAPH AT	60D	1292.	12.60	376.	119.	89.	1.78		
ROUTED TO	C60B	712.	13.50	366.	119.	89.	1.78		
HYDROGRAPH AT	60B	1504.	13.15	670.	219.	165.	3.53		
2 COMBINED AT	C60B	2183.	13.25	1027.	338.	254.	5.31		
ROUTED TO	C60A	1932.	13.85	1014.	337.	253.	5.31		
HYDROGRAPH AT	60C	786.	12.65	221.	70.	53.	1.19		
ROUTED TO	C60A	347.	13.75	208.	70.	52.	1.19		
HYDROGRAPH AT	60A	1408.	12.80	519.	167.	125.	2.88		

3 COMBINED AT	C60A	3063.	13.55	1705.	573.	430.	9.38		
ROUTED TO	C60	2866.	14.10	1684.	572.	430.	9.38		
HYDROGRAPH AT	60	1378.	13.30	609.	200.	150.	3.29		
2 COMBINED AT	C60	3895.	13.80	2257.	765.	575.	12.67		
HYDROGRAPH AT	59	811.	13.40	374.	125.	94.	2.29		
ROUTED TO	C60	654.	14.15	364.	125.	94.	2.29		
2 COMBINED AT	C60	4467.	13.85	2593.	883.	663.	14.96		
HYDROGRAPH AT	61	757.	12.80	252.	80.	60.	1.27		
ROUTED TO	C60	611.	13.30	250.	80.	60.	1.27		
2 COMBINED AT	C60	4953.	13.80	2828.	958.	720.	16.23		
ROUTED TO	C60	3724.	14.95	2788.	952.	715.	16.23	1541.91	15.00
ROUTED TO	C89T	3678.	15.35	2761.	951.	714.	16.23		
HYDROGRAPH AT	88T	345.	12.65	92.	29.	22.	0.63		
2 COMBINED AT	C89T	3717.	15.30	2810.	978.	735.	16.86		
HYDROGRAPH AT	SUB01	102.	12.25	20.	6.	5.	0.15		
ROUTED TO	R001	102.	12.30	20.	6.	5.	0.15	72.93	12.30
ROUTED TO	R001.1	58.	14.10	13.	5.	3.	0.15	90.25	14.00
HYDROGRAPH AT	SUB02	505.	12.65	178.	58.	44.	1.20		
HYDROGRAPH AT	SUB03	113.	12.15	15.	5.	3.	0.10		
ROUTED TO	R003	102.	12.20	15.	5.	3.	0.10	70.96	12.20
HYDROGRAPH AT	SUB05	94.	12.45	25.	8.	6.	0.19		
ROUTED TO	R005	94.	12.45	25.	8.	6.	0.19	69.44	12.55
2 COMBINED AT	C005	175.	12.30	40.	13.	10.	0.30		
ROUTED TO	R005.1	125.	13.05	34.	11.	9.	0.30	89.07	13.15
HYDROGRAPH AT	SUB04	242.	12.75	90.	30.	23.	0.73		
2 COMBINED AT	C004	349.	12.95	123.	42.	31.	1.02		
3 COMBINED AT	C004.1	803.	12.85	313.	105.	79.	2.37		
ROUTED TO	R004	752.	13.25	276.	96.	72.	2.37	2.41	13.35
HYDROGRAPH AT	SUB06	321.	12.55	89.	29.	22.	0.63		
2 COMBINED AT	C006	912.	13.15	358.	124.	93.	3.00		
HYDROGRAPH AT	SUB07	17.	12.05	2.	1.	0.	0.01		
ROUTED TO	R007	17.	12.10	2.	1.	0.	0.01	65.49	12.10
HYDROGRAPH AT	SUB08	35.	12.10	4.	1.	1.	0.02		

DIVERSION TO	DIV081	18.	12.10	1.	0.	0.	0.02		
HYDROGRAPH AT	DIV08	17.	12.10	3.	1.	1.	0.02		
2 COMBINED AT	CO08	34.	12.10	5.	2.	1.	0.03		
HYDROGRAPH AT	SUB09	871.	12.65	263.	82.	62.	1.25		
DIVERSION TO	DIV091	505.	12.65	143.	41.	31.	1.25		
HYDROGRAPH AT	DIV09	366.	12.65	120.	41.	30.	1.25		
ROUTED TO	ODIV09	341.	12.90	120.	41.	30.	1.25	95.41	12.95
HYDROGRAPH AT	SUB10	158.	12.30	31.	10.	7.	0.18		
HYDROGRAPH AT	DIV081	18.	12.10	1.	0.	0.	0.02		
3 COMBINED AT	CO10	401.	12.90	152.	50.	38.	1.43		
ROUTED TO	RO10	401.	12.90	152.	50.	38.	1.43	59.59	12.90
2 COMBINED AT	CO10.1	407.	12.90	156.	52.	39.	1.47		
HYDROGRAPH AT	SUB11	35.	12.05	4.	1.	1.	0.03		
ROUTED TO	RO11	30.	12.15	4.	1.	1.	0.03	52.14	12.10
DIVERSION TO	DIV111	3.	12.15	0.	0.	0.	0.03		
HYDROGRAPH AT	DIV11	27.	12.15	4.	1.	1.	0.03		
2 COMBINED AT	CO11	411.	12.90	160.	53.	40.	1.49		
HYDROGRAPH AT	SUB12	24.	12.25	4.	1.	1.	0.02		
HYDROGRAPH AT	DIV111	3.	12.15	0.	0.	0.	0.03		
2 COMBINED AT	CO12	24.	12.25	4.	1.	1.	0.02		
ROUTED TO	RO12	22.	12.35	4.	1.	1.	0.02	47.02	12.35
DIVERSION TO	DIV121	0.	0.05	0.	0.	0.	0.02		
HYDROGRAPH AT	DIV12	22.	12.35	4.	1.	1.	0.02		
2 COMBINED AT	CO12.1	419.	12.90	164.	54.	41.	1.51		
HYDROGRAPH AT	DIV091	505.	12.65	143.	41.	31.	1.25		
HYDROGRAPH AT	SUB13	425.	12.25	79.	25.	18.	0.42		
2 COMBINED AT	CO13	777.	12.35	222.	66.	50.	0.42		
ROUTED TO	RO13	707.	13.10	221.	66.	50.	0.42	77.17	13.15
HYDROGRAPH AT	SUB14	372.	12.40	86.	27.	20.	0.50		
HYDROGRAPH AT	DIV121	0.	0.05	0.	0.	0.	0.02		
3 COMBINED AT	CO14	859.	13.05	306.	93.	70.	0.93		
ROUTED TO	RO14	859.	13.05	306.	93.	70.	0.93	39.54	13.10
DIVERSION TO	DIV141	0.	0.05	0.	0.	0.	0.93		

HYDROGRAPH AT	DIV14	859.	13.05	306.	93.	70.	0.93		
2 COMBINED AT	CO14.1	1250.	13.00	469.	147.	111.	2.44		
HYDROGRAPH AT	DIV141	0.	0.05	0.	0.	0.	0.93		
ROUTED TO	RO14.1	0.	0.05	0.	0.	0.	0.93	36.40	0.00
2 COMBINED AT	CO14.2	1250.	13.00	469.	147.	111.	2.44		
ROUTED TO	RO14.2	1146.	13.40	421.	120.	90.	2.44	100.70	13.50
HYDROGRAPH AT	SUB15	148.	12.55	43.	14.	11.	0.32		
HYDROGRAPH AT	SUB16	224.	12.30	52.	16.	12.	0.40		
3 COMBINED AT	CO16	1273.	13.40	507.	150.	113.	3.15		
ROUTED TO	RO16	1267.	13.50	506.	150.	113.	3.15	87.96	13.60
HYDROGRAPH AT	SUB17	84.	12.45	21.	7.	5.	0.15		
2 COMBINED AT	CO17	1293.	13.50	526.	157.	118.	3.30		
2 COMBINED AT	CO17.1	2124.	13.45	883.	280.	211.	6.30		
ROUTED TO	RO17	2066.	13.70	846.	260.	195.	6.30	3.26	13.80
HYDROGRAPH AT	SUB18	322.	12.40	86.	28.	21.	0.66		
2 COMBINED AT	CO18	2157.	13.65	909.	288.	216.	6.96		
HYDROGRAPH AT	SUB19	86.	12.60	24.	8.	6.	0.19		
ROUTED TO	RO19	86.	12.60	24.	8.	6.	0.19	31.46	12.70
HYDROGRAPH AT	SUB20	456.	12.45	131.	42.	32.	0.81		
DIVERSION TO	DIV20B	264.	12.45	81.	26.	20.	0.81		
HYDROGRAPH AT	DIV20A	191.	12.45	50.	16.	12.	0.81		
ROUTED TO	RO20	187.	12.55	50.	16.	12.	0.81	30.62	12.65
DIVERSION TO	DIV20D	17.	12.55	1.	0.	0.	0.81		
HYDROGRAPH AT	DIV20C	171.	12.55	49.	16.	12.	0.81		
2 COMBINED AT	CO20.1	256.	12.60	74.	24.	18.	1.00		
HYDROGRAPH AT	DIV20B	264.	12.45	81.	26.	20.	0.81		
HYDROGRAPH AT	DIV20D	17.	12.55	1.	0.	0.	0.81		
2 COMBINED AT	CO20	283.	12.50	82.	27.	20.	0.01		
ROUTED TO	RO20.1	282.	12.55	82.	27.	20.	0.01	25.59	12.55
2 COMBINED AT	CO20.2	532.	12.55	155.	50.	38.	1.01		
ROUTED TO	RO20.2	469.	13.25	140.	47.	35.	1.01	93.87	13.30
HYDROGRAPH AT	SUB21	415.	12.70	141.	47.	35.	1.13		
2 COMBINED AT	CO21	766.	13.10	276.	93.	70.	2.14		

2 COMBINED AT	CO21.1	2731.	13.55	1183.	381.	286.	9.10		
2 COMBINED AT	C89T	5018.	13.95	3837.	1327.	997.	25.96		
ROUTED TO	C87T	4851.	15.20	3776.	1324.	995.	25.96		
HYDROGRAPH AT	87T	212.	13.55	101.	34.	26.	0.76		
2 COMBINED AT	C87T	4934.	15.15	3852.	1355.	1018.	26.72		
HYDROGRAPH AT	SUB22	402.	12.75	140.	47.	35.	1.14		
2 COMBINED AT	CO22	5014.	15.10	3933.	1398.	1050.	27.86		
HYDROGRAPH AT	SUB23	158.	12.40	37.	12.	9.	0.29		
ROUTED TO	RO23	151.	12.50	37.	12.	9.	0.29	17.91	12.50
DIVERSION TO	DIV231	0.	0.05	0.	0.	0.	0.29		
HYDROGRAPH AT	DIV23	151.	12.50	37.	12.	9.	0.29		
HYDROGRAPH AT	SUB24	1651.	12.85	573.	180.	135.	2.86		
HYDROGRAPH AT	DIV231	0.	0.05	0.	0.	0.	0.29		
2 COMBINED AT	CO24	1651.	12.85	573.	180.	135.	2.86		
DIVERSION TO	DIV24B	907.	12.85	340.	114.	86.	2.86		
HYDROGRAPH AT	DIV24A	743.	12.85	234.	65.	49.	2.86		
ROUTED TO	RO24A	744.	12.85	234.	65.	49.	2.86	14.91	12.85
HYDROGRAPH AT	DIV24B	907.	12.85	340.	114.	86.	2.86		
DIVERSION TO	DIV24D	123.	12.85	14.	3.	3.	2.86		
HYDROGRAPH AT	DIV24C	784.	12.85	326.	111.	83.	2.86		
ROUTED TO	RO24C	785.	12.85	326.	111.	83.	2.86	12.59	12.85
HYDROGRAPH AT	DIV24D	123.	12.85	14.	3.	3.	2.86		
ROUTED TO	RO24D	123.	12.85	14.	3.	3.	2.86	7.34	12.85
4 COMBINED AT	CO24.1	1749.	12.85	610.	191.	144.	3.14		
HYDROGRAPH AT	SUB25A	32.	12.20	5.	2.	1.	0.04		
2 COMBINED AT	CO25.1	1757.	12.85	615.	193.	145.	3.18		
HYDROGRAPH AT	SUB25B	62.	12.35	13.	4.	3.	0.10		
2 COMBINED AT	CO25.2	1784.	12.85	628.	197.	148.	3.28		
HYDROGRAPH AT	SUB25C	82.	12.55	23.	8.	6.	0.18		
ROUTED TO	RO25C	82.	12.55	23.	8.	6.	0.18	93.48	12.65
DIVERSION TO	DV25C2	0.	12.55	0.	0.	0.	0.18		
HYDROGRAPH AT	DV25C1	82.	12.55	23.	8.	6.	0.18		
2 COMBINED AT	CO25.3	1850.	12.80	651.	205.	154.	3.46		

HYDROGRAPH AT	SUB25D	352.	12.50	97.	31.	24.	0.65		
HYDROGRAPH AT	DV25C2	0.	12.55	0.	0.	0.	0.18		
2 COMBINED AT	CO25D	352.	12.50	97.	31.	24.	0.65		
ROUTED TO	RO25D	350.	12.50	97.	31.	24.	0.65	82.86	12.60
DIVERSION TO	DV25D2	0.	0.05	0.	0.	0.	0.65		
HYDROGRAPH AT	DV25D1	350.	12.50	97.	31.	24.	0.65		
2 COMBINED AT	CO25.4	2135.	12.80	747.	236.	177.	4.11		
HYDROGRAPH AT	SUB28	54.	12.35	12.	4.	3.	0.09		
HYDROGRAPH AT	DV25D2	0.	0.05	0.	0.	0.	0.65		
2 COMBINED AT	CO28	54.	12.35	12.	4.	3.	0.09		
2 COMBINED AT	CO28.1	2163.	12.80	758.	239.	180.	4.20		
ROUTED TO	RO28	2054.	13.10	734.	227.	171.	4.20	95.57	13.10
HYDROGRAPH AT	SUB26	228.	12.60	72.	24.	18.	0.57		
2 COMBINED AT	CO28.2	2209.	13.10	804.	251.	188.	4.78		
ROUTED TO	RO28.1	2114.	13.40	775.	241.	181.	4.78	95.58	13.50
HYDROGRAPH AT	SUB27	113.	12.65	40.	13.	10.	0.32		
3 COMBINED AT	CO27	6052.	14.25	4658.	1629.	1223.	32.96		
HYDROGRAPH AT	SUB36	154.	12.55	47.	15.	12.	0.37		
2 COMBINED AT	CO36	6087.	14.25	4683.	1642.	1234.	33.33		
HYDROGRAPH AT	SUB29	108.	12.35	23.	7.	6.	0.18		
HYDROGRAPH AT	SUB30	1841.	12.65	553.	172.	129.	2.72		
2 COMBINED AT	CO30	1911.	12.65	576.	180.	135.	2.90		
DIVERSION TO	DIV30B	956.	12.65	288.	90.	67.	2.90		
HYDROGRAPH AT	DIV30A	956.	12.65	288.	90.	67.	2.90		
ROUTED TO	RO30	955.	12.65	288.	90.	67.	2.90	44.56	12.65
HYDROGRAPH AT	DIV30B	956.	12.65	288.	90.	67.	2.90		
2 COMBINED AT	CO30.1	1911.	12.65	576.	180.	135.	2.90		
ROUTED TO	RO30.1	1905.	12.65	576.	180.	135.	2.90	32.99	12.65
HYDROGRAPH AT	SUB31	300.	12.30	60.	19.	14.	0.34		
HYDROGRAPH AT	SUB32	455.	12.30	99.	31.	23.	0.48		
2 COMBINED AT	CO32	754.	12.30	158.	49.	37.	0.82		
ROUTED TO	RO32	748.	12.35	158.	49.	37.	0.82	21.14	12.35
HYDROGRAPH AT	SUB32A	25.	12.25	4.	1.	1.	0.03		

ROUTED TO	RO32A	25.	12.25	4.	1.	1.	0.03	23.94	12.35
DIVERSION TO	DV32A2	10.	12.25	0.	0.	0.	0.03		
HYDROGRAPH AT	DV32A1	15.	12.25.	4.	1.	1.	0.03		
3 COMBINED AT	CO32.1	2397.	12.65	737.	230.	173.	3.75		
ROUTED TO	RO32.1	2360.	12.70	717.	225.	169.	3.75	96.03	12.75
HYDROGRAPH AT	SUB33	51.	12.50	13.	4.	3.	0.10		
HYDROGRAPH AT	SUB34	129.	12.30	26.	8.	6.	0.20		
3 COMBINED AT	CO34	2472.	12.70	756.	238.	178.	4.06		
ROUTED TO	RO34	2435.	12.80	731.	232.	174.	4.06	96.07	12.80
HYDROGRAPH AT	SUB35	42.	12.55	12.	4.	3.	0.09		
2 COMBINED AT	CO35	2469.	12.80	743.	235.	177.	4.15		
2 COMBINED AT	CO35.1	6840.	14.05	5205.	1857.	1395.	37.48		
ROUTED TO	C81T	6760.	14.35	5180.	1855.	1394.	37.48		
HYDROGRAPH AT	SUB38	265.	12.45	71.	23.	17.	0.56		
HYDROGRAPH AT	SUB39	675.	12.25	132.	41.	30.	0.71		
HYDROGRAPH AT	DV32A2	10.	12.25	0.	0.	0.	0.03		
2 COMBINED AT	CO39	684.	12.25	132.	41.	31.	0.71		
ROUTED TO	RO39	676.	12.30	132.	41.	31.	0.71	100.83	12.30
DIVERSION TO	DIV391	154.	12.30	9.	2.	2.	0.71		
HYDROGRAPH AT	DIV39	522.	12.30	123.	38.	29.	0.71		
ROUTED TO	RO39.1	473.	12.70	113.	36.	27.	0.71	93.91	12.75
HYDROGRAPH AT	SUB40	140.	12.45	37.	12.	9.	0.28		
3 COMBINED AT	CO40	824.	12.65	220.	70.	53.	1.55		
2 COMBINED AT	C81T	6921.	14.30	5315.	1919.	1441.	39.02		
HYDROGRAPH AT	DIV391	154.	12.30	9.	2.	2.	0.71		
HYDROGRAPH AT	SUB41	996.	12.45	250.	78.	58.	1.16		
2 COMBINED AT	CO41	1094.	12.40	259.	80.	60.	1.16		
DIVERSION TO	DIV411	170.	12.40	9.	2.	2.	1.16		
HYDROGRAPH AT	DIV41	924.	12.40	249.	78.	58.	1.16		
ROUTED TO	RO41	925.	12.40	249.	78.	58.	1.16	90.16	12.40
HYDROGRAPH AT	DIV411	170.	12.40	9.	2.	2.	1.16		
HYDROGRAPH AT	SUB42	426.	12.25	85.	26.	20.	0.42		
DIVERSION TO	DIV42B	173.	12.25	18.	4.	3.	0.42		

HYDROGRAPH AT	DIV42A	253.	12.25	67.	22.	16.	0.42		
2 COMBINED AT	CO42.1	413.	12.35	77.	24.	18.	0.42		
ROUTED TO	RO41.1	412.	12.35	77.	24.	18.	0.42	79.97	12.35
HYDROGRAPH AT	DIV42B	173.	12.25	18.	4.	3.	0.42		
DIVERSION TO	DIV42D	84.	12.25	5.	1.	1.	0.42		
HYDROGRAPH AT	DIV42C	89.	12.25	13.	3.	2.	0.42		
ROUTED TO	RO42	79.	12.45	13.	3.	2.	0.42	83.32	12.45
3 COMBINED AT	CO42	1401.	12.40	339.	105.	79.	1.57		
ROUTED TO	RO42	1338.	12.60	323.	97.	73.	1.57	95.62	12.60
HYDROGRAPH AT	SUB43	78.	12.45	20.	7.	5.	0.16		
2 COMBINED AT	CO43	1408.	12.60	343.	104.	78.	1.73		
HYDROGRAPH AT	82T	409.	13.80	215.	74.	56.	1.59		
3 COMBINED AT	C81T	7514.	14.20	5736.	2079.	1561.	42.35		
ROUTED TO	C78T	7461.	14.45	5715.	2077.	1560.	42.35		
HYDROGRAPH AT	78T	202.	13.10	74.	25.	19.	0.61		
3 COMBINED AT	C78T	12062.	16.60	10099.	4243.	3187.	103.41		
HYDROGRAPH AT	DIV42D	84.	12.25	5.	1.	1.	0.42		
HYDROGRAPH AT	SUB44	82.	12.20	13.	4.	3.	0.10		
2 COMBINED AT	CO44	163.	12.25	18.	5.	4.	0.10		
ROUTED TO	RO44	117.	12.60	17.	5.	4.	0.10	1.41	12.50
HYDROGRAPH AT	SUB45	120.	12.45	28.	9.	7.	0.22		
2 COMBINED AT	CO45	230.	12.50	45.	14.	11.	0.31		
HYDROGRAPH AT	SUB47	195.	12.30	40.	13.	10.	0.31		
2 COMBINED AT	CO47	399.	12.40	84.	27.	20.	0.62		
2 COMBINED AT	C78T	12084.	16.60	10127.	4265.	3204.	104.03		
ROUTED TO	C76T	11804.	17.20	9986.	4242.	3186.	104.03		
HYDROGRAPH AT	79T	663.	13.65	331.	115.	87.	2.80		
ROUTED TO	C76T	496.	14.70	315.	115.	86.	2.80		
2 COMBINED AT	C76T	12021.	17.20	10225.	4339.	3260.	106.83		
HYDROGRAPH AT	SUB46	1009.	12.25	206.	63.	48.	1.09		
ROUTED TO	RO46	915.	12.55	179.	54.	41.	1.09	96.01	12.55
HYDROGRAPH AT	SUB48	245.	12.10	28.	9.	7.	0.20		
ROUTED TO	RO48	122.	12.30	25.	8.	6.	0.20	91.78	12.45

HYDROGRAPH AT	SUB49	388.	12.30	72.	23.	17.	0.56
3 COMBINED AT	C049	1281.	12.50	276.	85.	64.	1.86
ROUTED TO	C76T	657.	13.20	274.	85.	64.	1.86
2 COMBINED AT	C76T	12085.	17.15	10335.	4412.	3315.	108.69
HYDROGRAPH AT	76T	878.	14.00	464.	166.	125.	4.05
2 COMBINED AT	C76T	12310.	17.15	10636.	4553.	3420.	112.74
HYDROGRAPH AT	66	345.	12.40	72.	23.	17.	0.54
ROUTED TO	C67	275.	12.65	72.	23.	17.	0.54
HYDROGRAPH AT	67	2323.	12.60	675.	210.	158.	6.20
2 COMBINED AT	C67	2594.	12.60	744.	233.	175.	6.74
ROUTED TO	C68	2489.	12.75	744.	233.	175.	6.74
HYDROGRAPH AT	68	707.	12.40	165.	51.	38.	1.67
2 COMBINED AT	C68	2977.	12.70	908.	284.	213.	8.41
ROUTED TO	C69	2380.	13.15	905.	284.	213.	8.41
HYDROGRAPH AT	69	424.	12.40	94.	30.	22.	0.71
2 COMBINED AT	C69	2528.	13.10	998.	314.	236.	9.12
ROUTED TO	C70	2429.	13.40	996.	314.	236.	9.12
HYDROGRAPH AT	70A	2720.	12.45	662.	206.	155.	5.87
ROUTED TO	C70	1909.	12.85	659.	206.	155.	5.87
HYDROGRAPH AT	70	529.	12.55	155.	50.	37.	1.03
3 COMBINED AT	C70	4286.	13.15	1773.	559.	420.	16.02
ROUTED TO	C71	3344.	14.00	1747.	558.	420.	16.02
HYDROGRAPH AT	71	418.	12.50	105.	34.	25.	0.83
2 COMBINED AT	C71	3428.	14.00	1827.	590.	443.	16.85
ROUTED TO	C72	3372.	14.25	1824.	590.	443.	16.85
HYDROGRAPH AT	72	871.	12.35	186.	57.	43.	2.10
2 COMBINED AT	C72	3459.	14.25	1959.	643.	483.	18.95
ROUTED TO	C73	2729.	15.45	1852.	642.	482.	18.95
HYDROGRAPH AT	73	1715.	12.35	368.	113.	85.	3.17
HYDROGRAPH AT	SUB57	396.	12.30	86.	27.	20.	0.40
3 COMBINED AT	C73	2860.	15.45	2087.	773.	580.	22.52
ROUTED TO	C74	2603.	16.50	1986.	771.	579.	22.52
HYDROGRAPH AT	SUB50	137.	12.15	19.	6.	5.	0.10

ROUTED TO	R050	122.	12.30	19.	6.	5.	0.10	1.36	12.35
HYDROGRAPH AT	SUB51	173.	12.20	29.	9.	7.	0.22		
2 COMBINED AT	C051	276.	12.25	48.	15.	11.	0.32		
HYDROGRAPH AT	SUB52	1107.	12.45	279.	87.	65.	1.21		
ROUTED TO	R052	1109.	12.45	279.	87.	65.	1.21	76.65	12.45
DIVERSION TO	DIV52B	217.	12.45	14.	4.	3.	1.21		
HYDROGRAPH AT	DIV52A	891.	12.45	264.	83.	63.	1.21		
HYDROGRAPH AT	DIV52B	217.	12.45	14.	4.	3.	1.21		
ROUTED TO	R052.1	219.	12.45	14.	4.	3.	1.21	74.24	12.45
DIVERSION TO	DIV52D	128.	12.45	6.	1.	1.	1.21		
HYDROGRAPH AT	DIV52C	91.	12.45	9.	2.	2.	1.21		
HYDROGRAPH AT	DIV52D	128.	12.45	6.	1.	1.	1.21		
ROUTED TO	R052.2	119.	12.50	6.	1.	1.	1.21	67.12	12.50
DIVERSION TO	DIV52F	2.	12.50	0.	0.	0.	1.21		
HYDROGRAPH AT	DIV52E	117.	12.50	5.	1.	1.	1.21		
HYDROGRAPH AT	DIV52F	2.	12.50	0.	0.	0.	1.21		
ROUTED TO	R052.3	1.	12.55	0.	0.	0.	1.21	55.80	0.00
DIVERSION TO	DIV52H	0.	0.05	0.	0.	0.	1.21		
HYDROGRAPH AT	DIV52G	1.	12.55	0.	0.	0.	1.21		
4 COMBINED AT	C052	1096.	12.50	279.	87.	65.	1.21		
ROUTED TO	R052	1056.	12.65	259.	82.	62.	1.21	96.33	12.65
HYDROGRAPH AT	SUB54	370.	12.25	67.	21.	16.	0.51		
2 COMBINED AT	C053	1234.	12.60	326.	103.	77.	1.73		
HYDROGRAPH AT	SUB53	328.	12.05	31.	10.	7.	0.16		
HYDROGRAPH AT	DIV52H	0.	0.05	0.	0.	0.	1.21		
2 COMBINED AT	C053	328.	12.05	31.	10.	7.	0.16		
DIVERSION TO	DIV53B	61.	12.05	1.	0.	0.	0.16		
HYDROGRAPH AT	DIV53A	267.	12.05	30.	9.	7.	0.16		
ROUTED TO	R053	190.	12.25	30.	9.	7.	0.16	89.69	12.30
HYDROGRAPH AT	DIV53B	61.	12.05	1.	0.	0.	0.16		
HYDROGRAPH AT	SUB55	125.	12.05	12.	4.	3.	0.06		
2 COMBINED AT	C055	186.	12.05	13.	4.	3.	0.06		
ROUTED TO	R055	88.	12.30	13.	4.	3.	0.06	89.09	12.35

HYDROGRAPH AT	SUB56	173.	12.15	26.	8.	6.	0.20
3 COMBINED AT	C056	429.	12.25	69.	22.	16.	0.42
ROUTED TO	C74	206.	12.70	69.	22.	16.	0.42
HYDROGRAPH AT	74	477.	12.95	157.	52.	39.	1.26
5 COMBINED AT	C74	2760.	16.50	2374.	950.	714.	26.24
ROUTED TO	C76T	2745.	16.75	2354.	950.	713.	26.24
2 COMBINED AT	C76T	14753.	17.05	12616.	5405.	4060.	138.98

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