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10TH STREET WASH DETENTION FACILITY NO. 2
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, ARIZONA

DESIGN CALCULATIONS

FLOOD CONTROL DISTRICT
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Rust Environment & Infrastructure
5343 North 16th Street, Suite 400
Phoenix, AZ 85016

TENTH STREET WASH DETENTION FACILITY NO. 2

Facility No. 2 Layout

A bypass channel is provided to carry small flow events past the facility. This bypass channel is trapezoidal, with a bottom elevation ranging from 1256.65 to 1257.00. For a distance of 142 feet, the channel runs parallel to a diversion weir that admits flow into Basin 2A. The weir crest is set at elevation 1260.30. The nominal bottom elevation of Basin 2A is 1248.00, but the bottom is graded toward a 36-inch diameter low-level outlet which has an invert at 1247.25. The lower edge of a drop inlet structure leading to Basin 2B is set at elevation 1256.00. This inlet has an effective width of 18 feet, and extends 16 feet upslope. It has a total effective flow area of 193 square feet. Flow is conveyed to Basin 2B through two 60-inch diameter pipes. Basin 2B is drained by a 24-inch diameter pipe with an invert elevation set at 1247.50. The 36-inch and 24-inch low-level outlets both drain to a 48-inch, which carries the flow back to the Tenth Street Wash south of Alice Avenue.

Description of Facility No. 2 Operation during the 6-hour, 100-year storm event

The depth of flow in the bypass channel is controlled by a headwall and box culvert entrance located 180 feet downstream of the toe of the slope at Townley Avenue. The depth of flow in the channel reaches 3.30 feet when the flow is approximately 250 cfs. Shortly after this flow rate is surpassed, diversion across the side flow weir into Basin 2A begins. As the diversion begins, inflow is already entering the basin from Palma Park Tributary (Basin 144). At the time the diversion starts, Basin 2A has filled to elevation 1251.50 (3.50 feet), and the inflow from Palma Park is 172 cfs. The 36-inch outlet from Basin 2A is flowing at 45 cfs. Once the diversion begins, Basin 2A fills rapidly. In nine minutes, the flow across Townley Avenue has increased to 675 cfs, with 330 cfs of that flow diverting into Basin 2A. At this point, the water level has reached elevation 1256.00, and water begins to spill into the drop inlet leading to Basin 2B. Within 12 minutes, the twin 60-inch pipes are flowing full with over 500 cfs discharging into Basin 2B.

In rapid succession, several important occurrences in the basin operation take place:

- The Basin 2A water lever reaches elevation 1260.30, thus creating the potential for backwater on the weir flow.

- Two minutes later, the inflow across Townley Avenue reaches its peak. Simultaneously, the peak diversion of 764 cfs occurs: at this moment, 450 cfs is bypassing the facility.

- After twelve more minutes, the peak inflow to Basin 2B occurs; it is 716 cfs. The water levels in the two basins differ by 8.89 feet which is the maximum differential.

- Six minutes after that, Basin 2A reaches its peak elevation of 1263.16. Submergence of the weir has cut the inflow to Basin 2A to 432 cfs. At this time, the bypass rate peaks at 577 cfs.

Within 48 minutes, the basins equalize at elevation 1258.60. Now the two basins drain in tandem through their respective low level outlets. Because the outlet from Basin 2A has nearly twice the

capacity of the outlet from Basin 2B, there is a small reverse flow (initially 28 cfs and slowly rising to 40 cfs) through the twin 60-inch pipes into Basin 2A. This flow is also necessary to keep the basin elevations equal because the surface area of Basin 2B is larger than that of 2A.

The exchange of flow ends when the water levels fall below 1256.00, which happens 2.5 hours after the Basin 2B peak. Basin 2A drains 7.0 hours later, while Basin 2B requires 20 hours to drain from elevation 1256.00.

System Analysis

Design and evaluation of Tenth Street Wash detention facility No. 2 was conducted using the FEQ unsteady flow hydraulic model. The FEQ model was used because of the complex interactions among detention basin components that cannot be modeled using HEC-1 or HEC-2.

The specific areas of concern were the following:

- Side flow weir hydraulics; namely the tendency for the momentum of the bypass flow to reduce the diversion flow.

- Submergence of the side flow weir by the filling of Basin 2A.

- Submergence of the flow in the twin 60-inch pipes by the filling of Basin 2B.

- Equalization of Basins 2A and 2B after the flood peak passes and the backflow through the twin 60-inch pipes that keeps them equal.

As demonstrated by the description of basin operations presented in the previous section, the FEQ model is able to address these issues in detail while providing a technically sound hydraulic analysis of individual structures.

The analysis of the detention facility is presented in three appendices. The contents of these appendices are the following:

Appendix A - FEQ Model

Exhibit A-1 - FEQ Model Synopsis
Exhibit A-2 - FEQ Model Schematic
Exhibit A-3 - FEQ Model Main Input File (C1A.FEQ)
Exhibit A-4 - FEQ Model Input Tables
Exhibit A-5 - FEQUTL Input Files
Exhibit A-6 - Maximum Modeled Flows and Stages
Exhibit A-7 - Hydrographs and Stages-graphs at Selected Locations

Appendix B - Model Results Verification

Exhibit B-1 - Basin 2A Side Flow Weir Calculations
Exhibit B-2 - Basin 2A Drop Inlet Rating Curve Computations
Exhibit B-3 - Twin 60-inch Losses
Exhibit B-4 - Bypass CBC Computations (Storm Plus)
Exhibit B-5 - Open Channel Computations (Storm Plus)
Exhibit B-6 - Low Level Outlet Capacities
Exhibit B-7 - Palma Park CBC Computatuion (Hy-8)

Appendix C - HEC-1 Representation of Detention Facility No. 2

Exhibit C-1 - HEC-1 Model Schematic
Exhibit C-2 - FEQ and Computed Wier Flow Comparison
Exhibit C-3 - Rating Curve for Outflow from Basin 2A
Exhibit C-4 - Rating Curve for Outflow from Basin 2B
Exhibit C-5 - Basins 2A and 2B Stage/Storage Relations
Exhibit C-6 - HEC-1 Model Input and Output

Appendix D - Existing Condition HEC-1 Model

APPENDIX A

FEQ MODEL INPUT AND RESULTS

EXHIBIT A-1
FEQ MODEL SYNOPSIS

Hydraulic evaluation of Tenth Street Wash Detention facility No. 2 was conducted using the FEQ unsteady flow hydraulic model. The unsteady flow hydraulic analysis was deemed necessary to analyze possible effects of tailwater submergence on both the side flow weir and the twin 60-inch equalizer pipes. The FEQ model also provides superior hydraulic computational methods for the analysis of side flow weirs, transverse weirs, and expansion/contraction losses. Given the numerous hydraulically sensitive control points in the detention facility, Rust E&I determined that the sophisticated performance evaluation provided by FEQ was required. The FEQ (Full Equations) model is written and maintained by Dr. Delbert D. Franz of Linsley-Kraeger Associates in Mountain View, California. The model was originally written in 1976 and has undergone significant upgrade due to many years of continuous use. Currently, the United States Geological Survey is in the process of adopting the model as the official hydraulic companion to HSPF.

The following paragraphs describe the basic components of the FEQ model used to simulate the operation of Detention Facility No. 2.

System Representation

Three basic model building elements are available in FEQ. These can be combined to represent very complex drainage systems.

1. Branches - A branch is a reach of channel which has a known length and cross-section. The cross-section shape can change and, if needed, cross-section can be repeated or interpolated by FEQ. Branches can represent closed conduits as well as open channels.

2. Level Pool Reservoirs - Reservoirs are storage sites where the motion of the flow is considered unimportant.

3. Null Branches - Also known as dummy branches, null branches are used to represent flow paths which are relatively short. In such cases, the travel time and flow storage is negligible. Most often, null branches are used to aid in the representation of multiple flow paths entering or leaving a location.

The Tenth Street Wash Detention Facility No. 2 FEQ model consists of two level pool reservoirs, eight branches, and eight null branches. The schematic of the FEQ model is provided in Exhibit A-2. The level pool reservoirs are used to represent storage in Basins 2A and 2B. Branches are used to represent the bypass channel, including the twin 6 feet by 4 feet box culverts; the 24-inch and 36-inch low level outlet pipes; and the twin 60-inch equalizer pipes connecting Basins 2A and 2B. The null branches are employed in the numerous instances of multiple flow paths entering or leaving a single location. One example is the inflows to Site 2A from Palma Park and from the main channel over the side flow weir. A second instance is the multiple outflows from Basin 2A: the low level outlet and the drop inlet to the twin 60-inch pipes.

FEQ Model Input Files

FEQ model input has four main components:

1. Run Control Input - Specifies numerous items FEQ needs to run, such as the starting and ending times, the numbers of branches and nodes, and parameters to control convergence of the iterative solutions.

2. Branch Description Table - Specifies the lengths of the model branches and the locations of surveyed cross-sections.

3. Network Control Matrix - Defines how model elements are connected together. This input is used to specify the existence of bridges, culverts gates, weirs and other control structures.

4. Function Table Input - Function tables provide FEQ with its key computational needs, namely, the geometric elements of the channel cross-sections, system inflow hydrographs, the stage-storage curves for the reservoirs, and rating curves describing control structure hydraulics. The function tables are usually input from separate files. Each table is assigned a number which is used to refer to it in the branch description and network control inputs.

The first three items are contained in the FEQ Model Main Input File (CIA.FEQ), Exhibit A-3. The last item is provided in Exhibit A-4. The contents of the table files developed for use in the Tenth Street Wash model are the following.

FLOW.TAB	-	Hydrographs defining the flows into the modeled system at Townley Avenue and Palma Park. Flow in these hydrographs were obtained using the HEC-1 model.
MULCON.TAB	-	Cross-section tables for closed conduits.
ONEDIM.TAB	-	One-dimensional rating curves and stage-area-storage curves.
TWOD.TAB	-	Two-dimensional rating curves.
XSEC.TAB	-	Cross-section tables for open channel cross-sections.

Derivation of Function Tables

A unique feature of the FEQ modeling system is the two-dimensional table. While there are several forms, the basic function of the 2-D table is to compute flows under submerged conditions. In other words, the 2-D table is used to define flows for the full range of headwater and tailwater elevations. The derivation of 2-D tables can be extremely onerous for many real hydraulic structures. Fortunately, FEQ is accompanied by a powerful utility program, called FEQUTL which can be used to compute 2-D tables for a variety of common hydraulic structures including bridges, weirs, culverts and expansions and contractions. FEQUTL also computes cross-section elements for channel cross-sections and several common closed conduit shapes. The FEQUTL input files used

in the Detention Basin No. 2 analysis are provided in Exhibit A-5. The FEQUTL commands used in the development of Detention Facility No. 2 were the following:

FEQX - Computes geometric elements of an open channel cross-section for the full range of potential flow depths.

MULCON - Computes geometric elements as a function of depth for single or multiple closed conduits.

EMBANKQ - Computes a two-dimensional table (rating curve) for flow over a broad crested weir.

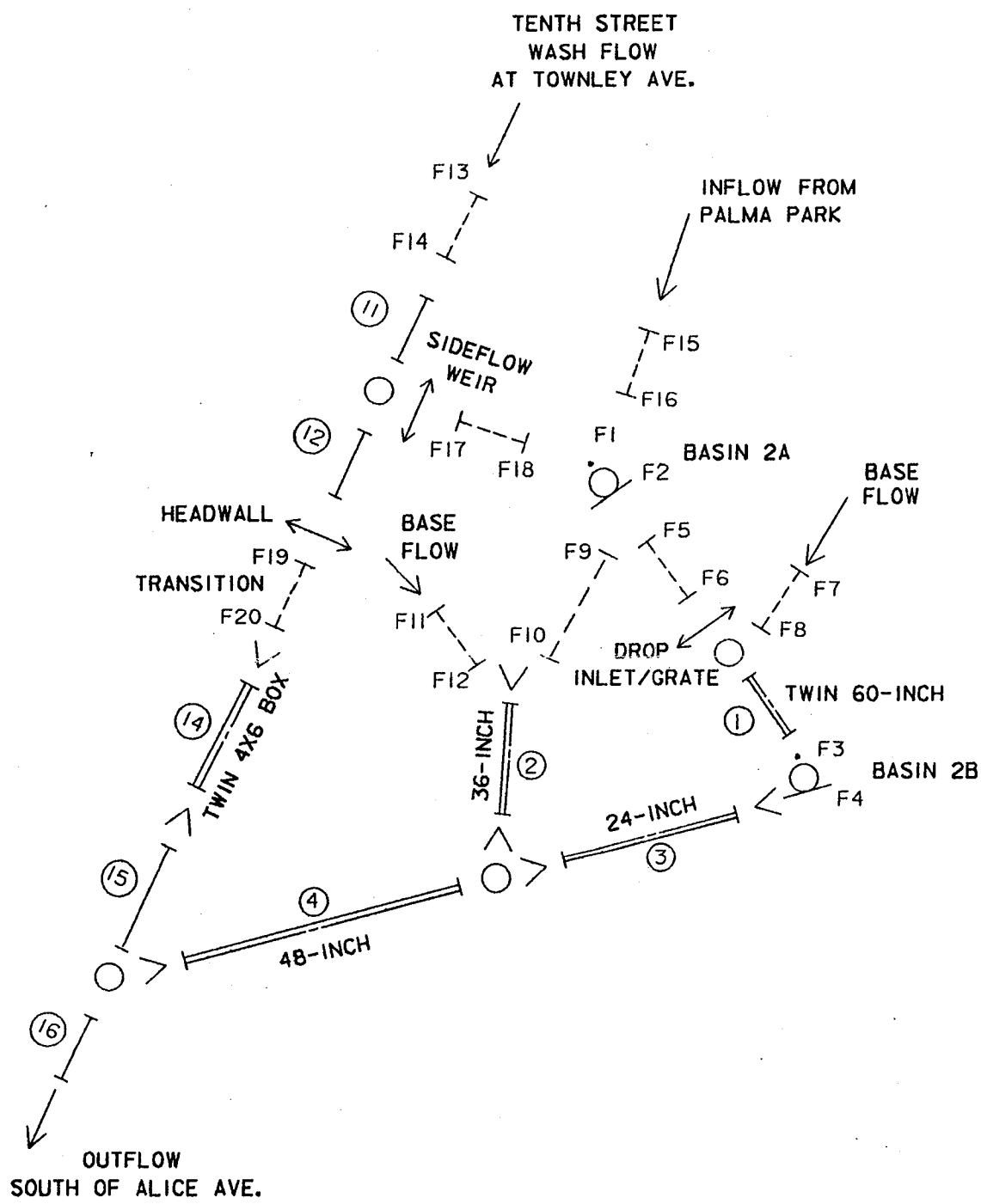
EXPCON - Computes a two-dimensional table for flow through an arbitrary transition. (FEQUTL determines whether the transition is an expansion or a contraction, and also determines the head loss.)

Simulation Results

System inflows for the FEQ model were obtained from using HEC-1 results corresponding to the 10th Street Wash at Townley Avenue and the regulated release from Palma Park. These hydrographs used a three minute (0.05 hour) time step. The downstream boundary condition for the open channel flow in the wash was based on the presumption of normal depth.

FEQ results consist of the elevation and flow at each modeled element (cross section or reservoir) at each modeled time step. Thus, hydrographs and stage-graphs are available for every location analyzed. Maximum flows and stages at all modeled locations are provided in Exhibit A-6. Selected hydrographs and stage-graphs are provided in Exhibit A-7. The analysis of the 100-year design event indicates that submergence of both the side flow weir and the twin 60-inch pipes occurs. The weir submergence occurs near the end of the event and lasts approximately 50 minutes. Submergence of the 60-inch pipes is necessary for basin equalization. The equalizer pipes are in a free-flow condition until shortly after the flood peak passes. The basins equalize approximately 1 hour and 12 minutes after the peak flow.

Upon completion of the FEQ analysis and accompanying design modifications, the results of final FEQ runs were used to update the HEC-1 model of the Tenth Street Wash watershed. Specifically, the hydraulic performance of the side flow weir, the equalizer pipe, and the two low-level outlets were converted to rating curves for use in HEC-1. Where needed, DI-DQ relations or SE-SQ relations were taken directly from simultaneous stage or flow outputs produced by FEQ. Because these discharge ratings are the same, the revised HEC-1 model produces essentially the same results as the FEQ model.



LEGEND

- BRANCH - OPEN CHANNEL
- BRANCH - CLOSED CONDUIT
- LEVEL POOL RESERVOIR
- NULL BRANCH
- 2-DIMENSIONAL RATING CURVE
- EXPANSION / CONTRACTION
- JUNCTION
- F1 FREE NODE NUMBER
- (1) BRANCH NUMBER

EXHIBIT A-2

RUST ENVIRONMENT & INFRASTRUCTURE

FEQ MODEL SCHEMATIC
TENTH STREET WASH
DETENTION FACILITY NO. 2
FLOOD CONTROL DISTRICT OF
MARICOPA COUNTY, ARIZONA

SEPTEMBER, 1995

EXHIBIT A-3

FEQ MODEL MAIN INPUT FILE (C1A.FEQ)

```
FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
USES TWIN 8 BY 4 OPENINGS AS BYPASS CONTROL WITH TWIN 6 BY 4 DWNSTRM
18 BY 16 GRATE, NO CLOGGING TWIN 60-IN EQLZERS   9/14/95 FILE: C1A.FEQ
* REVISED 9/13 BY EDL TO REFLECT FINAL DESIGN PROFILES
* REVISED 9/14 BY EDL INCREASED SIZE OF LOWLEVEL OUTLET FROM 2A
NBRA=00009
NEX=00038
SOPER=NO
POINT=NO
DIFFUS=NO
WIND=NO
UNDERFLOW=NO
ZL=1.0
STIME=1980/01/01: 0.00
ETIME=1980/01/01:24.00
GRAV=32.2
NODEID=YES
SSEPS=0.25
PAGE=00022
EPSSYS= 0.05 0.01  5.0
MKNT=    6 2
OUTPUT=    0
PRTINT=0000299999
GEQOPT=STDX
EPSB=0.00005
MAXIT=   40
SFAC=   1.0
QSMALL=10.0
IFRZ=00005
    180.    180.    100.     50.     25.
 180. 0.01  0.7  3.0  3.0  2.4  1.5  0.5
MRE=     0.100       0.0
DWT=0.1
BWT=0.67
BWFDSN=   04BWF
CHKGEO=NO
ISTYLE=NEW
EXTTOL= 0.1
SQREPS= 1.0E03
GETIC=
PUTFC=
BRANCH DESCRIPTION TABLES
BNUM=   1  INERTIA=  0.0 CFRATE=  0.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM   CF   YC
  100 US60       260      0.00   1248.50    0    0    0    0      1260




      DS60       260    408.00   1248.00    0    0    0    0      1260
   -1
BNUM=   2  INERTIA=  0.0 CFRATE=  0.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM   CF   YC
  200 US36        36      0.00   1247.25    0    0    0    0      1260




      DS36        36    719.00   1245.87    0    0    0    0      1260
   -1
BNUM=   3  INERTIA=  0.0 CFRATE=  0.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM   CF   YC
  300 US24B       24      0.00   1247.50    0    0    0    0      1260




      DS24B       24     93.00   1246.87    0    0    0    0      1260
   -1
BNUM=   4  INERTIA=  0.0 CFRATE=  0.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM   CF   YC
```

```
  400 US48        48    719.00   1244.87    0    0    0    0      1260
```

```
      DS48        48   1187.00   1244.28    0    0    0    0      1260
   -1
BNUM=  11  INERTIA=  1.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM
 1100 TOWNLEY    100    970.00   1257.00    0    0    0    0
```

```
      DIVRSION   100    860.00   1256.79    0    0    0    0
   -1
BNUM=  12  INERTIA=  1.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM
 1200 DIVRSION   100    860.00   1256.79    0    0    0    0
```

```
      HEADWALL   100    790.00   1256.65    0    0    0    0
   -1
BNUM=  14  INERTIA=  0.0 CFRATE=  0.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM   CF   YC
 1400 US 6BY 4   106    780.00   1256.57    0    0    0    0      1270
```

```
      DS 6BY 4   106    200.00   1252.00    0    0    0    0      1270
   -1
*
*  START NEW STATION = OLD STATION + 800 FEET
*
BNUM=  15  INERTIA=  0.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM
 1500 U/S CHAN   102   1000.00   1252.00    0    0    0    0
```

```
      U/S RTRN   102    565.00   1244.28    0    0    0    0
   -1
BNUM=  16  INERTIA=  0.0
 NODE NAME      XNUM   STATION ELEVATION   KA   KD HTAB  AZM
 1600 D/SRETRN   102    565.00   1244.28    0    0    0    0
```

```
     OUTFALL    102    458.00   1243.00    0    0    0    0
   -1
EXTERIOR-MATRIX CONTROL INPUT
 CODE   A   B   C   D   E   F   G   H   I   J     FA     FB     FC     FD
* INFLOW HYDROGRAPH CROSSING TOWNELY ROAD
    6   1 F13   1 801
   15 F13 F14
    3 F14 U11
    2   2 F14 U11
    1  11
* CHANNEL AT MIDPOINT OF DIVERSION WEIR WHERE DIVERSION IS ASSUMED
   13 D11 U12
    1  12
* CONTRACTION AT ENTRANCE TO TWIN 4 BY 8 BOXES
    5   6 D12 F19 D12 515 516                1256.65
    2   2 D12 F19
   15 F19 F20
* SMOOTH TRANSITION TO TWIN 4 BY 6 BOXES.
    5   6 F20 U14 F20 517 518                1256.65
    2   2 F20 U14
    1  14
* OUTLET OF 4 BY 6 BOXES
    5   1 D14 U15 D14   1 106                   1.0    0.5   1252
    2   2 D14 U15
    1  15
* JUNCTION WITH RETURN CONDUIT FROM SITE 2
   13 D15 U16
    3  D4 U16
*    5   1  D4 U16  D4  +1  48                   1.0    0.5 1244.78
    2   3 D15 U16  D4
* BOUNDARY CONDITION AT OUTLET (NORMAL DEPTH)
    1  16
    4   3 D16  -1 D16
*
*** DETENTION SYSTEM
*
*  INFLOW FROM PALMA PARK
    6   1 F15   1 802
   15 F15 F16
    3 F16  F1
*  SIDE FLOW DIVERSION WEIR INTO BASIN 2A
    2   3 D11 U12 F17
   14 D11 U12 F17 500 500                     0.5 1260.3
   15 F17 F18
    3 F18  F1
    2   3  F1 F16 F18
* DETENTION BASIN 2A
    7  F2 401   1  F1
    2   3  F2  F5  F9
* LOW LEVEL OUTLET FROM BASIN 2A
    5   1  F2  F9  F9  -1  36                  0.5    1.0 1247.25
*    5   6  F2  F9  F9 530 531                1248.0
   15  F9 F10
    3 F10  U2
    2   3 F10 F12  U2
    1   2
    5   1  D2  U4  D2  +1  36                  1.0    0.5 1245.87
* BASE FLOW IN BRANCH 2
    3 F12  U2
   15 F11 F12
    6   1 F11   1                              0.1
* DROP INLET FROM BASIN 2A TO 2B
    3  F2  F5
   15  F5  F6
    5   2  F6  U1  F6 410 899 410 899         1256.0
    2   3  F6  U1  F8
* TWIN 60-INCH CONNECTING BASIN 2A AND 2B
    1   1
    2   2  D1  F3
    5   1  D1  F3  D1   1 266                  1.0    0.5   1248
* DETENTION BASIN 2B
    7  F4 402   1  F3
* LOW LEVEL OUTLET FROM BASIN 2B
    5   1  F4  U3  U3  -1  24                  0.5    1.0   1248
    2   2  F4  U3
    1   3
    5   1  D3  U4  D3  +1  24                  1.0    0.5 1246.87
    2   3  D2  D3  U4
    1   4
* BASE FLOW IN BRANCH 1
   15  F7  F8
```

```
    6   1  F7   1                                0.1
    3  F8  U1
   -1
BNODE=
SPECIAL OUTPUT LOCATIONS
UNIT=    3C1A.SPO
  BRA NODE
    0  D11  U/S    WEIR
    0  U12  D/S    WEIR
    0  D12  HEAD   WALL
    0  F17  WEIR   FLOW
    0   F2 BASIN    2A
    0   F4 BASIN    2B
    0   U1  U/S    60-IN
    0   D1  D/S    60-IN
    0   U2 BAS2A  36-INCH
    0   U3 BAS2B  24-INCH
    0   U4 RETURN 48-INCH
   -1
INPUT FILE SPECIFICATION
 UNIT NAME
   -1
OUTPUT FILE SPECIFICATION
 UNIT  BRA NODE ITEM TYPE NAME
   -1
FUNCTION TABLES BLOCK
TABLE#=  -15TABLES\MULCON.TAB
TABLE#=  -15TABLES\ONEDIM.TAB
TABLE#=  -15TABLES\TWOD.TAB
TABLE#=  -15TABLES\XSEC.TAB
TABLE#=  -15TABLES\FLOW.TAB
TABLE#=   -1
FREE NODE INITIAL CONDITIONS
 NODE     NAME     DEPTH DISCHARGE ELEVATION SIGN
   F1  BASIN2A   1247.25      0.00      0.00   -1
   F2  BASIN2A   1247.25      0.00      0.00   +1
   F3  BASIN2B   1248.10      0.10      0.00   -1
   F4  BASIN2B   1248.10      0.10      0.00   +1
   F5  2ATO2B    1248.00      0.00      0.00   -1
   F6  2ATO2B    1248.00      0.00      0.00   +1
   F7  BASEQB1   1248.00      0.10      0.00   -1
   F8  BASEQB1   1248.00      0.10      0.00   +1
   F9  2AOUTL    1248.00      0.00      0.00   -1
  F10  2AOUTL    1248.00      0.00      0.00   +1
  F11  BASEQB2   1248.10      0.10      0.00   -1
  F12  BASEQB2   1248.10      0.10      0.00   +1
  F13  TOWNINFL  1257.05      1.00      0.00   -1
  F14  TOWNINFL  1257.05      1.00      0.00   +1
  F15  PALMAINF  1248.00      0.00      0.00   -1
  F16  PALMAINF  1248.00      0.00      0.00   +1
  F17  SIDEWEIR  1248.00      0.00      0.00   -1
  F18  SIDEWEIR  1248.00      0.00      0.00   +1
  F19  TRNSITON  1256.00      1.00      0.00   -1
  F20  TRNSTION  1256.00      1.00      0.00   +1
BACKWATER ANALYSIS BLOCK
BRANCH NUMBER=   -1
DISCHARGE= 0.1
BRANCH NUMBER=   -2
DISCHARGE= 0.1
BRANCH NUMBER=   -3
DISCHARGE= 0.1
BRANCH NUMBER=   -4
DISCHARGE= 0.2
BRANCH NUMBER=  -11
DISCHARGE= 1.0
BRANCH NUMBER=  -12
DISCHARGE= 1.0
;BRANCH NUMBER=  -13
;DISCHARGE= 1.0
BRANCH NUMBER=  -14
DISCHARGE= 1.0
BRANCH NUMBER=  -15
DISCHARGE= 1.0
BRANCH NUMBER=  -16
DISCHARGE= 1.2
  BRA CODE ELEVATION EXN#
    4    2    1244.5
    3    2    1247.0
    2    2    1246.0
    1    1    1248.1
   16    2    1243.1
   15                U16
   14                U15
    0  F20           U14
```

```
    0  F19            F20
   12    2    1256.7
;  13                 U14
;  12                 U13
   11                 U12
    0  F14            U11
    0  F13            F14
   -1
```

EXHIBIT A-4

FEQ MODEL INPUT TABLES

```
* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* FLOW.TAB

TABLE#=  801
TYPE=   -7
REFL=  000.00  FAC= 1.000
YEAR MN DY  HOUR    FLOW
1980 01 01    0.000       1.
1980 01 01    1.000       1.
1980 01 01    2.000       1.
1980 01 01    3.000       1.
1980 01 01    3.050       1.
1980 01 01    3.100       1.
1980 01 01    3.150       1.
1980 01 01    3.200       1.
1980 01 01    3.250       1.
1980 01 01    3.300       1.
1980 01 01    3.350       2.
1980 01 01    3.400      37.
1980 01 01    3.450      85.
1980 01 01    3.500     101.
1980 01 01    3.550     119.
1980 01 01    3.600     145.
1980 01 01    3.650     184.
1980 01 01    3.700     234.
1980 01 01    3.750     294.
1980 01 01    3.800     375.
1980 01 01    3.850     516.
1980 01 01    3.900     680.
1980 01 01    3.950     834.
1980 01 01    4.000     980.
1980 01 01    4.050    1094.
1980 01 01    4.100    1172.
1980 01 01    4.150    1209.
1980 01 01    4.200    1220.
1980 01 01    4.250    1215.
1980 01 01    4.300    1188.
1980 01 01    4.350    1136.
1980 01 01    4.400    1071.
1980 01 01    4.450    1011.
1980 01 01    4.500     952.
1980 01 01    4.550     891.
1980 01 01    4.600     826.
1980 01 01    4.650     762.
1980 01 01    4.700     705.
1980 01 01    4.750     650.
1980 01 01    4.800     593.
1980 01 01    4.850     530.
1980 01 01    4.900     467.
1980 01 01    4.950     410.
1980 01 01    5.000     360.
1980 01 01    5.050     319.
1980 01 01    5.100     283.
1980 01 01    5.150     252.
1980 01 01    5.200     226.
1980 01 01    5.250     205.
```

1980	01	01	5.300	188.
1980	01	01	5.350	176.
1980	01	01	5.400	166.
1980	01	01	5.450	157.
1980	01	01	5.500	151.
1980	01	01	5.550	146.
1980	01	01	5.600	142.
1980	01	01	5.650	140.
1980	01	01	5.700	138.
1980	01	01	5.750	136.
1980	01	01	5.800	135.
1980	01	01	5.850	134.
1980	01	01	5.900	134.
1980	01	01	5.950	133.
1980	01	01	6.000	132.
1980	01	01	6.050	132.
1980	01	01	6.100	131.
1980	01	01	6.150	129.
1980	01	01	6.200	127.
1980	01	01	6.250	125.
1980	01	01	6.300	122.
1980	01	01	6.350	118.
1980	01	01	6.400	114.
1980	01	01	6.450	109.
1980	01	01	6.500	105.
1980	01	01	6.550	102.
1980	01	01	6.600	98.
1980	01	01	6.650	95.
1980	01	01	6.700	92.
1980	01	01	6.750	89.
1980	01	01	6.800	87.
1980	01	01	6.850	85.
1980	01	01	6.900	84.
1980	01	01	6.950	83.
1980	01	01	7.000	82.
1980	01	01	7.050	81.
1980	01	01	7.100	80.
1980	01	01	7.150	80.
1980	01	01	7.200	79.
1980	01	01	7.250	79.
1980	01	01	7.300	78.
1980	01	01	7.350	78.
1980	01	01	7.400	77.
1980	01	01	7.450	77.
1980	01	01	7.500	76.
1980	01	01	7.550	76.
1980	01	01	7.600	76.
1980	01	01	7.650	75.
1980	01	01	7.700	75.
1980	01	01	7.750	74.
1980	01	01	7.800	74.
1980	01	01	7.850	73.
1980	01	01	7.900	73.
1980	01	01	7.950	72.
1980	01	01	8.000	72.
1980	01	01	8.050	72.
1980	01	01	8.100	71.

1980	01	01	8.150	71.
1980	01	01	8.200	70.
1980	01	01	8.250	70.
1980	01	01	8.300	69.
1980	01	01	8.350	69.
1980	01	01	8.400	69.
1980	01	01	8.450	68.
1980	01	01	8.500	68.
1980	01	01	8.550	67.
1980	01	01	8.600	67.
1980	01	01	8.650	67.
1980	01	01	8.700	66.
1980	01	01	8.750	66.
1980	01	01	8.800	65.
1980	01	01	8.850	65.
1980	01	01	8.900	65.
1980	01	01	8.950	64.
1980	01	01	9.000	64.
1980	01	01	10.000	55.
1980	01	01	11.000	46.
1980	01	01	12.000	35.
1980	01	01	13.000	26.
1980	01	01	14.000	23.
1980	01	01	15.000	22.
1980	01	01	16.000	20.
1980	01	01	17.000	18.
1980	01	01	18.000	16.
1980	01	01	19.000	14.
1980	01	01	20.000	13.
1980	01	01	21.000	12.
1980	01	01	22.000	11.
1980	01	01	23.000	10.
1980	01	01	24.000	10.
1980	01	01	0.000	0.

TABLE#= 802
TYPE= -7
REFL= 000.00 FAC= 1.000

YEAR	MN	DY	HOUR	FLOW
1980	01	01	0.000	0.
1980	01	01	1.000	0.
1980	01	01	2.000	0.
1980	01	01	2.050	0.
1980	01	01	2.100	0.
1980	01	01	2.150	0.
1980	01	01	2.200	0.
1980	01	01	2.250	0.
1980	01	01	2.300	0.
1980	01	01	2.350	3.
1980	01	01	2.400	13.
1980	01	01	2.450	14.
1980	01	01	2.500	14.
1980	01	01	2.550	15.
1980	01	01	2.600	15.
1980	01	01	2.650	16.
1980	01	01	2.700	16.
1980	01	01	2.750	17.
1980	01	01	2.800	17.

1980	01	01	2.850	18.
1980	01	01	2.900	19.
1980	01	01	2.950	20.
1980	01	01	3.000	21.
1980	01	01	3.050	23.
1980	01	01	3.100	25.
1980	01	01	3.150	28.
1980	01	01	3.200	32.
1980	01	01	3.250	35.
1980	01	01	3.300	40.
1980	01	01	3.350	46.
1980	01	01	3.400	54.
1980	01	01	3.450	63.
1980	01	01	3.500	72.
1980	01	01	3.550	87.
1980	01	01	3.600	106.
1980	01	01	3.650	137.
1980	01	01	3.700	172.
1980	01	01	3.750	211.
1980	01	01	3.800	257.
1980	01	01	3.850	316.
1980	01	01	3.900	350.
1980	01	01	3.950	350.
1980	01	01	4.000	350.
1980	01	01	4.050	350.
1980	01	01	4.100	350.
1980	01	01	4.150	350.
1980	01	01	4.200	350.
1980	01	01	4.250	350.
1980	01	01	4.300	350.
1980	01	01	4.350	350.
1980	01	01	4.400	350.
1980	01	01	4.450	350.
1980	01	01	4.500	350.
1980	01	01	4.550	350.
1980	01	01	4.600	328.
1980	01	01	4.650	272.
1980	01	01	4.700	231.
1980	01	01	4.750	195.
1980	01	01	4.800	165.
1980	01	01	4.850	138.
1980	01	01	4.900	114.
1980	01	01	4.950	97.
1980	01	01	5.000	82.
1980	01	01	5.050	68.
1980	01	01	5.100	56.
1980	01	01	5.150	46.
1980	01	01	5.200	39.
1980	01	01	5.250	34.
1980	01	01	5.300	29.
1980	01	01	5.350	25.
1980	01	01	5.400	24.
1980	01	01	5.450	22.
1980	01	01	5.500	22.
1980	01	01	5.550	21.
1980	01	01	5.600	20.
1980	01	01	5.650	20.

1980	01	01	5.700	20.
1980	01	01	5.750	19.
1980	01	01	5.800	19.
1980	01	01	5.850	19.
1980	01	01	5.900	19.
1980	01	01	5.950	19.
1980	01	01	6.000	19.
1980	01	01	6.050	19.
1980	01	01	6.100	19.
1980	01	01	6.150	18.
1980	01	01	6.200	17.
1980	01	01	6.250	15.
1980	01	01	6.300	13.
1980	01	01	6.350	11.
1980	01	01	6.400	9.
1980	01	01	6.450	6.
1980	01	01	6.500	5.
1980	01	01	6.550	3.
1980	01	01	6.600	2.
1980	01	01	6.650	2.
1980	01	01	6.700	1.
1980	01	01	6.750	1.
1980	01	01	6.800	1.
1980	01	01	6.850	0.
1980	01	01	6.900	0.
1980	01	01	6.950	0.
1980	01	01	7.000	0.
1980	01	01	7.050	0.
1980	01	01	7.100	0.
1980	01	01	7.150	0.
1980	01	01	7.200	0.
1980	01	01	7.250	0.
1980	01	01	7.300	0.
1980	01	01	7.350	0.
1980	01	01	7.400	0.
1980	01	01	7.450	0.
1980	01	01	7.500	0.
1980	01	01	8.000	0.
1980	01	01	9.000	0.
1980	01	01	10.000	0.
1980	01	01	11.000	0.
1980	01	01	12.000	0.
1980	01	01	13.000	0.
1980	01	01	14.000	0.
1980	01	01	15.000	0.
1980	01	01	16.000	0.
1980	01	01	17.000	0.
1980	01	01	18.000	0.
1980	01	01	19.000	0.
1980	01	01	20.000	0.
1980	01	01	21.000	0.
1980	01	01	22.000	0.
1980	01	01	23.000	0.
1980	01	01	24.000	0.
1980	01	01	0.000	0.

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* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* MULCON.TAB

TABLE#=   24
TYPE=  -20
STATION= 0.00000E+00
ELEVATION=-2.05998E-03                    EXT=-99.9      FAC=1.000
     DEPTH TOP WIDTH          AREA   SQRT(CONV)       BETA
   0.00000     0.000  0.00000E+00  0.00000E+00     1.0000
   0.01234     0.314  1.93391E-03  8.62553E-02     1.0000
   0.04904     0.619  1.90546E-02  4.60693E-01     1.0000
   0.10922     0.910  6.50621E-02  1.11984E+00     1.0000
   0.19138     1.178  1.50829E-01  2.05025E+00     1.0000
   0.29350     1.417  2.83336E-01  3.21872E+00     1.0000
   0.41306     1.621  4.64988E-01  4.57692E+00     1.0000
   0.54713     1.786  6.93381E-01  6.06549E+00     1.0000
   0.69241     1.906  9.61532E-01  7.61837E+00     1.0000
   0.84530     1.979  1.25857E+00  9.16726E+00     1.0000
   1.00206     2.004  1.57080E+00  1.06461E+01     1.0000
   1.15882     1.979  1.88302E+00  1.19951E+01     1.0000
   1.31171     1.906  2.18006E+00  1.31649E+01     1.0000
   1.45699     1.786  2.44821E+00  1.41194E+01     1.0000
   1.59106     1.621  2.67660E+00  1.48377E+01     1.0000
   1.71062     1.417  2.85826E+00  1.50638E+01     1.0000
   1.81274     1.178  2.99076E+00  1.50638E+01     1.0000
   1.89490     0.910  3.07653E+00  1.50638E+01     1.0000
   1.95508     0.619  3.12254E+00  1.50638E+01     1.0000
   1.99178     0.314  3.13966E+00  1.50638E+01     1.0000
   2.00373     0.010  3.14159E+00  1.50638E+01     1.0000
 500.00000     0.010  8.12155E+00  1.50638E+01     1.0000
       -1.
TABLE#=   30
TYPE=  -20
STATION= 0.00000E+00
ELEVATION=-2.57498E-03                    EXT=-99.9      FAC=1.000
     DEPTH TOP WIDTH          AREA   SQRT(CONV)       BETA
   0.00000     0.000  0.00000E+00  0.00000E+00     1.0000
   0.01542     0.392  3.02174E-03  1.16145E-01     1.0000
   0.06131     0.774  2.97728E-02  6.20333E-01     1.0000
   0.13652     1.137  1.01660E-01  1.50789E+00     1.0000
   0.23922     1.472  2.35670E-01  2.76070E+00     1.0000
   0.36687     1.771  4.42713E-01  4.33408E+00     1.0000
   0.51633     2.027  7.26544E-01  6.16293E+00     1.0000
   0.68392     2.232  1.08341E+00  8.16732E+00     1.0000
   0.86551     2.383  1.50239E+00  1.02583E+01     1.0000
   1.05663     2.474  1.96652E+00  1.23439E+01     1.0000
   1.25257     2.505  2.45437E+00  1.43352E+01     1.0000
   1.44852     2.474  2.94222E+00  1.61517E+01     1.0000
   1.63964     2.383  3.40634E+00  1.77269E+01     1.0000
   1.82123     2.232  3.82533E+00  1.90120E+01     1.0000
   1.98882     2.027  4.18219E+00  1.99793E+01     1.0000
   2.13828     1.771  4.46603E+00  2.02816E+01     1.0000
   2.26593     1.472  4.67307E+00  2.02816E+01     1.0000
   2.36863     1.137  4.80708E+00  2.02816E+01     1.0000
   2.44384     0.774  4.87897E+00  2.02816E+01     1.0000
   2.48973     0.392  4.90572E+00  2.02816E+01     1.0000
```

2.50476	0.010	4.90874E+00	2.02816E+01	1.0000
500.00000	0.010	9.88368E+00	2.02816E+01	1.0000

-1.

TABLE#= 36
TYPE= -20
STATION= 0.00000E+00
ELEVATION=-3.08997E-03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	0.000	0.00000E+00	0.00000E+00	1.0000
0.01851	0.470	4.35130E-03	1.48107E-01	1.0000
0.07357	0.929	4.28728E-02	7.91042E-01	1.0000
0.16383	1.365	1.46390E-01	1.92284E+00	1.0000
0.28706	1.767	3.39365E-01	3.52042E+00	1.0000
0.44024	2.126	6.37506E-01	5.52678E+00	1.0000
0.61960	2.432	1.04622E+00	7.85890E+00	1.0000
0.82070	2.679	1.56011E+00	1.04149E+01	1.0000
1.03861	2.859	2.16345E+00	1.30813E+01	1.0000
1.26795	2.969	2.83178E+00	1.57408E+01	1.0000
1.50309	3.006	3.53429E+00	1.82800E+01	1.0000
1.73823	2.969	4.23680E+00	2.05965E+01	1.0000
1.96757	2.859	4.90514E+00	2.26052E+01	1.0000
2.18548	2.679	5.50848E+00	2.42440E+01	1.0000
2.38658	2.432	6.02236E+00	2.54774E+01	1.0000
2.56593	2.126	6.43108E+00	2.58611E+01	1.0000
2.71912	1.767	6.72922E+00	2.58611E+01	1.0000
2.84235	1.365	6.92219E+00	2.58611E+01	1.0000
2.93261	0.929	7.02571E+00	2.58611E+01	1.0000
2.98767	0.470	7.06423E+00	2.58611E+01	1.0000
3.00579	0.010	7.06858E+00	2.58611E+01	1.0000
500.00000	0.010	1.20385E+01	2.58611E+01	1.0000

-1.

TABLE#= 42
TYPE= -20
STATION= 0.00000E+00
ELEVATION=-3.60497E-03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	0.000	0.00000E+00	0.00000E+00	1.0000
0.02159	0.549	5.92260E-03	1.81902E-01	1.0000
0.08583	1.084	5.83546E-02	9.71543E-01	1.0000
0.19113	1.592	1.99253E-01	2.36160E+00	1.0000
0.33491	2.061	4.61914E-01	4.32372E+00	1.0000
0.51362	2.480	8.67717E-01	6.78789E+00	1.0000
0.72286	2.837	1.42403E+00	9.65216E+00	1.0000
0.95748	3.125	2.12348E+00	1.27914E+01	1.0000
1.21171	3.336	2.94469E+00	1.60662E+01	1.0000
1.47928	3.464	3.85437E+00	1.93326E+01	1.0000
1.75361	3.507	4.81056E+00	2.24512E+01	1.0000
2.02793	3.464	5.76675E+00	2.52962E+01	1.0000
2.29550	3.336	6.67643E+00	2.77632E+01	1.0000
2.54972	3.125	7.49765E+00	2.97760E+01	1.0000
2.78435	2.837	8.19710E+00	3.12909E+01	1.0000
2.99359	2.480	8.75341E+00	3.17605E+01	1.0000
3.17230	2.061	9.15921E+00	3.17605E+01	1.0000
3.31608	1.592	9.42188E+00	3.17605E+01	1.0000
3.42138	1.084	9.56277E+00	3.17605E+01	1.0000
3.48562	0.549	9.61520E+00	3.17605E+01	1.0000
3.50682	0.010	9.62113E+00	3.17605E+01	1.0000

500.00000	0.010	1.45861E+01	3.17605E+01	1.0000

-1.

TABLE#= 48
TYPE= -20
STATION= 0.00000E+00
ELEVATION=-4.11996E-03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	0.000	0.00000E+00	0.00000E+00	1.0000
0.02467	0.627	7.73564E-03	2.17350E-01	1.0000
0.09809	1.239	7.62183E-02	1.16087E+00	1.0000
0.21844	1.820	2.60249E-01	2.82182E+00	1.0000
0.38275	2.356	6.03316E-01	5.16630E+00	1.0000
0.58699	2.834	1.13334E+00	8.11068E+00	1.0000
0.82613	3.243	1.85995E+00	1.15331E+01	1.0000
1.09427	3.571	2.77352E+00	1.52841E+01	1.0000
1.38481	3.812	3.84613E+00	1.91971E+01	1.0000
1.69061	3.959	5.03428E+00	2.31001E+01	1.0000
2.00412	4.008	6.28319E+00	2.68264E+01	1.0000
2.31763	3.959	7.53209E+00	3.02258E+01	1.0000
2.62343	3.812	8.72024E+00	3.31736E+01	1.0000
2.91397	3.571	9.79285E+00	3.55786E+01	1.0000
3.18211	3.243	1.07064E+01	3.73887E+01	1.0000
3.42125	2.834	1.14330E+01	3.79483E+01	1.0000
3.62549	2.356	1.19631E+01	3.79483E+01	1.0000
3.78980	1.820	1.23061E+01	3.79483E+01	1.0000
3.91015	1.239	1.24902E+01	3.79483E+01	1.0000
3.98357	0.627	1.25586E+01	3.79483E+01	1.0000
4.00785	0.010	1.25664E+01	3.79483E+01	1.0000
500.00000	0.010	1.75263E+01	3.79483E+01	1.0000

-1.

TABLE#= 260
TYPE= -20
STATION= 0.00000E+00
ELEVATION=-5.14995E-03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	0.000	0.00000E+00	0.00000E+00	1.0000
0.03084	1.568	2.41739E-02	3.98837E-01	1.0000
0.12261	3.097	2.38182E-01	2.13020E+00	1.0000
0.27305	4.549	8.13277E-01	5.17803E+00	1.0000
0.47844	5.890	1.88536E+00	9.48017E+00	1.0000
0.73374	7.086	3.54170E+00	1.48831E+01	1.0000
1.03266	8.107	5.81235E+00	2.11633E+01	1.0000
1.36784	8.928	8.66726E+00	2.80463E+01	1.0000
1.73102	9.530	1.20192E+01	3.52267E+01	1.0000
2.11326	9.897	1.57321E+01	4.23886E+01	1.0000
2.50515	10.021	1.96350E+01	4.92264E+01	1.0000
2.89704	9.897	2.35378E+01	5.54643E+01	1.0000
3.27928	9.530	2.72508E+01	6.08735E+01	1.0000
3.64246	8.928	3.06027E+01	6.52867E+01	1.0000
3.97764	8.107	3.34576E+01	6.86082E+01	1.0000
4.27656	7.086	3.57282E+01	6.96315E+01	1.0000
4.53186	5.890	3.73845E+01	6.96315E+01	1.0000
4.73725	4.549	3.84566E+01	6.96315E+01	1.0000
4.88769	3.097	3.90317E+01	6.96315E+01	1.0000
4.97946	1.568	3.92457E+01	6.96315E+01	1.0000
5.00991	0.020	3.92699E+01	6.96315E+01	1.0000
500.00000	0.020	4.91698E+01	6.96315E+01	1.0000

-1.
TABLE#= 106
TYPE= -20
STATION= 0.00000E+00
ELEVATION= 0.00000E+00 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	12.000	0.00000E+00	0.00000E+00	1.0000
0.08000	12.000	9.60000E-01	4.48033E+00	1.0000
0.99750	12.000	1.19700E+01	3.36318E+01	1.0000
1.99500	12.000	2.39400E+01	5.56365E+01	1.0000
2.99250	12.000	3.59100E+01	7.34083E+01	1.0000
3.99000	12.000	4.78800E+01	7.88594E+01	1.0000
4.01000	0.020	4.80002E+01	7.88594E+01	1.0000
500.00000	0.020	5.79202E+01	7.88594E+01	1.0000

-1.
TABLE#= 266
TYPE= -20
STATION= 0.00000E+00
ELEVATION=-5.66495E-03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	0.000	0.00000E+00	0.00000E+00	1.0000
0.03393	1.724	2.92504E-02	4.52882E-01	1.0000
0.13487	3.406	2.88200E-01	2.41886E+00	1.0000
0.30035	5.004	9.84065E-01	5.87970E+00	1.0000
0.52629	6.479	2.28129E+00	1.07648E+01	1.0000
0.80712	7.794	4.28546E+00	1.68999E+01	1.0000
1.13593	8.918	7.03295E+00	2.40311E+01	1.0000
1.50462	9.821	1.04874E+01	3.18468E+01	1.0000
1.90412	10.483	1.45432E+01	4.00002E+01	1.0000
2.32458	10.887	1.90359E+01	4.81326E+01	1.0000
2.75567	11.023	2.37583E+01	5.58970E+01	1.0000
3.18675	10.887	2.84807E+01	6.29802E+01	1.0000
3.60721	10.483	3.29734E+01	6.91224E+01	1.0000
4.00671	9.821	3.70292E+01	7.41336E+01	1.0000
4.37540	8.918	4.04836E+01	7.79052E+01	1.0000
4.70421	7.794	4.32311E+01	7.90656E+01	1.0000
4.98504	6.479	4.52353E+01	7.90656E+01	1.0000
5.21098	5.004	4.65325E+01	7.90656E+01	1.0000
5.37646	3.406	4.72284E+01	7.90656E+01	1.0000
5.47740	1.724	4.74873E+01	7.90656E+01	1.0000
5.51094	0.020	4.75166E+01	7.90656E+01	1.0000
500.00000	0.020	5.74065E+01	7.90656E+01	1.0000

-1.
TABLE#= 272
TYPE= -20
STATION= 0.00000E+00
ELEVATION=-6.17994E-03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	0.000	0.00000E+00	0.00000E+00	1.0000
0.03701	1.881	3.48104E-02	5.08593E-01	1.0000
0.14713	3.716	3.42982E-01	2.71641E+00	1.0000
0.32765	5.459	1.17112E+00	6.60298E+00	1.0000
0.57413	7.068	2.71492E+00	1.20890E+01	1.0000
0.88049	8.503	5.10005E+00	1.89788E+01	1.0000
1.23919	9.728	8.36979E+00	2.69872E+01	1.0000
1.64140	10.714	1.24809E+01	3.57644E+01	1.0000
2.07722	11.436	1.73076E+01	4.49207E+01	1.0000

2.53591	11.877	2.26543E+01	5.40535E+01	1.0000
3.00618	12.025	2.82743E+01	6.27731E+01	1.0000
3.47645	11.877	3.38944E+01	7.07276E+01	1.0000
3.93514	11.436	3.92411E+01	7.76254E+01	1.0000
4.37096	10.714	4.40678E+01	8.32530E+01	1.0000
4.77317	9.728	4.81789E+01	8.74885E+01	1.0000
5.13187	8.503	5.14486E+01	8.87903E+01	1.0000
5.43823	7.068	5.38337E+01	8.87903E+01	1.0000
5.68471	5.459	5.53775E+01	8.87903E+01	1.0000
5.86523	3.716	5.62057E+01	8.87903E+01	1.0000
5.97535	1.881	5.65138E+01	8.87903E+01	1.0000
6.01197	0.020	5.65487E+01	8.87903E+01	1.0000
500.00000	0.020	6.64285E+01	8.87903E+01	1.0000

-1.

TABLE#= 104
TYPE= -20
STATION= 0.00000E+00
ELEVATION= 0.00000E+00 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	20.000	0.00000E+00	0.00000E+00	1.0000
0.08000	20.000	1.60000E+00	5.80426E+00	1.0000
0.99750	20.000	1.99500E+01	4.49673E+01	1.0000
1.99500	20.000	3.99000E+01	7.61172E+01	1.0000
2.99250	20.000	5.98500E+01	1.02077E+02	1.0000
3.99000	20.000	7.98000E+01	1.07884E+02	1.0000
4.01000	0.020	8.00002E+01	1.07884E+02	1.0000
500.00000	0.020	8.99202E+01	1.07884E+02	1.0000

-1.

TABLE#= 108
TYPE= -20
STATION= 0.00000E+00
ELEVATION= 0.00000E+00 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA
0.00000	16.000	0.00000E+00	0.00000E+00	1.0000
0.08000	16.000	1.28000E+00	5.18469E+00	1.0000
0.99750	16.000	1.59600E+01	3.96775E+01	1.0000
1.99500	16.000	3.19200E+01	6.65361E+01	1.0000
2.99250	16.000	4.78800E+01	8.86174E+01	1.0000
3.99000	16.000	6.38400E+01	9.43060E+01	1.0000
4.01000	0.020	6.40002E+01	9.43060E+01	1.0000
500.00000	0.020	7.39202E+01	9.43060E+01	1.0000

-1.

```
* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* ONEDIM.TAB

TABLE#=  401
TYPE=    3
REFL=    1248.0 FAC=  43560.
*STAGE VS STORAGE FOR BASIN 2A
 ELEVATION  STORAGE     AREA
   1247.25    0.00       0.00
     1248.    0.25       0.67
     1250.    1.76       0.84
     1252.    3.65       1.04
     1254.    5.93       1.24
     1256.    8.61       1.44
     1258.   11.72       1.67
     1260.   15.29       1.90
     1262.   19.33       2.14
     1263.   21.53       2.26
     1264.   23.85       2.38
     1265.   27.04       4.00      DUMMY OVERFLOW POINT
        -1
TABLE#=  402
TYPE=    2
REFL=    1248.0 FAC=  43560.
*STAGE VS STORAGE FOR BASIN 2
 ELEVATION  STORAGE
     1248.     0.00       2.65
     1250.     6.66       4.01
     1252.    15.03       4.37
     1254.    24.31       4.91
     1256.    34.60       5.38
     1258.    45.89       5.92
    1258.5    48.88       6.06
    1259.5    55.02       6.21
     1260.    58.20       6.51
     1262.    72.83       8.00     DUMMY OVERFLOW POINT
        -1
TABLE#=  410
TYPE=    2
REFL= 0.0      FAC=  2.4
*FREE FLOW RELATION FOR BASIN 2A OUTLET THROUGH 15 BY 16 GRATE
*BASED ON THE ORIFICE FORMULA
*NO CLOGGING WHEN FAC=2.0
*FAC=2.4 INCREASES SIZE TO 18 BY 16
*50 PERCENT CLOGGING WHEN FAC=1.0
    HEAD   DISCHARGE
     0.000      0.00
     0.500      22.7
     1.000      64.2
     2.000     181.5
     3.000     333.5
     4.000     513.4
     5.000     653.3
     6.000     761.7
     7.000     855.1
     8.000     938.7
```

```
        -1
TABLE#=  899
TYPE=   -2
REFL= 0.0      FAC= 1.0
 HEADRATIO FLOWRATIO  SUBMERGENCE TABLE FOR PIPE BASED ON ORIFICE EQUATION
      0.00      1.00
      0.10     0.949
      0.25     0.866
      0.50     0.707
      0.75      0.50
      0.84      0.40
      0.96      0.20
      1.00      0.00
        -1
```

```
* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* TWOD.TAB

TABLE#=  500
TYPE=  -13 HDATUM=  1260.300
LABEL= FLOW OVER SIDE FLOW WEIR CREST INTO BASIN 2A
NHUP=   19
NPFD=   20
HUP      1000-5 5000-5 1000-4 1500-4 2000-4 3000-4 4000-4 5000-4 6000-4 7000-4
FDROP    1992-6 9961-6 2002-5 2998-5 4004-5 5996-5 7998-5 1000-4 1200-4 1400-4
   PFD           Flows for HUP and Proportion of FDROP
 2500-6 0000+0 0000+0 0000+0 6190-4 7195-4 8874-4 2063-3 2314-3 2539-3 4168-3
 1000-5 0000+0 3490-4 1004-3 1238-3 2158-3 4437-3 7220-3 9256-3 1270-2 1528-2
 2250-5 0000+0 6980-4 2007-3 3714-3 5036-3 9760-3 1547-2 2083-2 2793-2 3612-2
 4000-5 1539-4 1047-3 3513-3 6190-3 9353-3 1775-2 2682-2 3818-2 4951-2 6390-2
 6250-5 1539-4 1745-3 5019-3 9285-3 1439-2 2751-2 4229-2 5901-2 7744-2 1000-1
 9000-5 1539-4 2376-3 7109-3 1298-2 2038-2 3722-2 5787-2 8131-2 1065-1 1362-1
 1225-4 2435-4 2761-3 7933-3 1468-2 2274-2 4209-2 6523-2 9146-2 1204-1 1540-1
 1600-4 2804-4 3012-3 8656-3 1602-2 2482-2 4613-2 7142-2 1001-1 1317-1 1684-1
 2025-4 2804-4 3331-3 9489-3 1761-2 2721-2 5035-2 7819-2 1096-1 1442-1 1841-1
 2500-4 3085-4 3498-3 1013-2 1870-2 2905-2 5375-2 8330-2 1168-1 1538-1 1963-1
 3025-4 3325-4 3770-3 1083-2 1998-2 3098-2 5737-2 8884-2 1246-1 1640-1 2094-1
 3600-4 3490-4 3920-3 1132-2 2091-2 3244-2 6004-2 9304-2 1305-1 1718-1 2193-1
 4225-4 3627-4 4089-3 1178-2 2182-2 3382-2 6256-2 9694-2 1359-1 1789-1 2285-1
 4900-4 3728-4 4227-3 1214-2 2247-2 3486-2 6448-2 9991-2 1401-1 1845-1 2355-1
 5625-4 3803-4 4328-3 1243-2 2301-2 3565-2 6596-2 1023-1 1434-1 1888-1 2410-1
 6400-4 3869-4 4407-3 1268-2 2345-2 3634-2 6723-2 1042-1 1461-1 1924-1 2456-1
 7225-4 3953-4 4475-3 1286-2 2379-2 3687-2 6823-2 1057-1 1483-1 1952-1 2492-1
 8100-4 3983-4 4522-3 1300-2 2405-2 3726-2 6895-2 1069-1 1498-1 1973-1 2518-1
 9025-4 4028-4 4566-3 1311-2 2427-2 3760-2 6958-2 1078-1 1512-1 1991-1 2541-1
 1000-3 4039-4 4579-3 1315-2 2434-2 3771-2 6979-2 1082-1 1516-1 1997-1 2549-1
HUP      8000-4 9000-4 1000-3 2000-3 3000-3 4000-3 5000-3 6000-3 1000-2
FDROP    1600-4 1800-4 2000-4 4000-4 6000-4 8000-4 1000-3 1200-3 2000-3
   PFD           Flows for HUP and Proportion of FDROP
 2500-6 4471-3 6338-3 6690-3 1895-2 3484-2 5366-2 7503-2 1028-1 2180-1
 1000-5 1937-2 2377-2 2676-2 7819-2 1423-1 2213-1 3076-1 4029-1 8720-1
 2250-5 4321-2 5229-2 6188-2 1753-1 3222-1 4930-1 6902-1 9086-1 1962+0
 4000-5 7749-2 9348-2 1104-1 3104-1 5719-1 8787-1 1230+0 1616+0 3483+0
 6250-5 1222-1 1458-1 1706-1 4856-1 8911-1 1375+0 1920+0 2523+0 5441+0
 9000-5 1672-1 2002-1 2341-1 6645-1 1220+0 1881+0 2628+0 3458+0 7450+0
 1225-4 1888-1 2258-1 2648-1 7496-1 1378+0 2122+0 2967+0 3901+0 8405+0
 1600-4 2063-1 2467-1 2893-1 8195-1 1506+0 2320+0 3243+0 4265+0 9188+0
 2025-4 2257-1 2702-1 3168-1 8974-1 1649+0 2539+0 3550+0 4669+0 1006+1
 2500-4 2407-1 2879-1 3377-1 9562-1 1757+0 2706+0 3784+0 4975+0 1072+1
 3025-4 2567-1 3071-1 3603-1 1020+0 1875+0 2888+0 4037+0 5309+0 1144+1
 3600-4 2688-1 3215-1 3771-1 1068+0 1963+0 3023+0 4226+0 5558+0 1197+1
 4225-4 2801-1 3350-1 3929-1 1113+0 2045+0 3150+0 4403+0 5790+0 1247+1
 4900-4 2887-1 3453-1 4050-1 1147+0 2108+0 3247+0 4539+0 5969+0 1286+1
 5625-4 2954-1 3534-1 4145-1 1174+0 2158+0 3323+0 4645+0 6108+0 1316+1
 6400-4 3011-1 3602-1 4224-1 1197+0 2199+0 3386+0 4734+0 6225+0 1341+1
 7225-4 3055-1 3654-1 4286-1 1214+0 2231+0 3436+0 4803+0 6316+0 1361+1
 8100-4 3087-1 3693-1 4331-1 1227+0 2255+0 3472+0 4854+0 6382+0 1375+1
 9025-4 3116-1 3727-1 4371-1 1238+0 2275+0 3504+0 4898+0 6441+0 1387+1
 1000-3 3125-1 3738-1 4384-1 1242+0 2282+0 3514+0 4913+0 6460+0 1392+1
TABLE#=  515
TYPE=  -14 HDATUM=  1256.650
```

```
LABEL=UD 8x4ENTR
NHDN=   22
NPFQ=   10
QFREE   3210-2 9079-2 1668-1 2568-1 3064-1 3589-1 4140-1 4718-1 5320-1 5945-1
HDN     5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
 4000-5 5004-4 1001-3 1501-3 2001-3 2252-3 2502-3 2752-3 3002-3 3252-3 3503-3
 9000-5 5018-4 1004-3 1505-3 2007-3 2258-3 2509-3 2760-3 3011-3 3262-3 3513-3
 1600-4 5057-4 1011-3 1517-3 2023-3 2276-3 2529-3 2782-3 3036-3 3289-3 3542-3
 2500-4 5140-4 1028-3 1543-3 2057-3 2315-3 2572-3 2830-3 3088-3 3345-3 3603-3
 3600-4 5297-4 1060-3 1590-3 2121-3 2387-3 2653-3 2919-3 3185-3 3452-3 3718-3
 4900-4 5566-4 1114-3 1672-3 2231-3 2511-3 2792-3 3072-3 3353-3 3634-3 3915-3
 6400-4 6004-4 1201-3 1805-3 2409-3 2712-3 3016-3 3319-3 3623-3 3927-3 4232-3
 8100-4 6678-4 1337-3 2009-3 2683-3 3021-3 3359-3 3698-3 4037-3 4377-3 4717-3
 1000-3 7665-4 1535-3 2307-3 3082-3 3471-3 3860-3 4250-3 4640-3 5031-3 5422-3
QFREE   7263-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1
HDN     4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3 8500-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3 8500-3
 4000-5 4003-3 4503-3 5003-3 5503-3 6004-3 6504-3 7004-3 7504-3 8004-3 8504-3
 9000-5 4015-3 4516-3 5017-3 5517-3 6018-3 6518-3 7018-3 7519-3 8019-3 8519-3
 1600-4 4048-3 4552-3 5054-3 5555-3 6057-3 6557-3 7058-3 7559-3 8059-3 8559-3
 2500-4 4119-3 4627-3 5132-3 5636-3 6138-3 6640-3 7142-3 7643-3 8144-3 8645-3
 3600-4 4252-3 4767-3 5276-3 5783-3 6288-3 6792-3 7295-3 7798-3 8300-3 8801-3
 4900-4 4478-3 5003-3 5518-3 6030-3 6538-3 7045-3 7550-3 8054-3 8557-3 9060-3
 6400-4 4843-3 5378-3 5900-3 6415-3 6927-3 7437-3 7944-3 8449-3 8954-3 9458-3
 8100-4 5401-3 5944-3 6469-3 6988-3 7503-3 8014-3 8523-3 9030-3 9535-3 1004-2
 1000-3 6209-3 6757-3 7283-3 7802-3 8317-3 8829-3 9338-3 9846-3 1035-2 1086-2
QFREE   7291-1 7291-1
HDN     9000-3 1000-2
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 9000-3 1000-2
 4000-5 9004-3 1000-2
 9000-5 9019-3 1002-2
 1600-4 9060-3 1006-2
 2500-4 9146-3 1015-2
 3600-4 9303-3 1030-2
 4900-4 9562-3 1056-2
 6400-4 9961-3 1097-2
 8100-4 1054-2 1155-2
 1000-3 1136-2 1237-2
TABLE#=  516
TYPE=  -14 HDATUM=  1256.650
LABEL=DU 8x4ENTR
NHDN=   22
NPFQ=   10
QFREE   2897-2 8139-2 1493-1 2295-1 2737-1 3204-1 3694-1 4207-1 4742-1 5297-1
HDN     5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
 4000-5 5000-4 9999-4 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
 9000-5 4998-4 9995-4 1499-3 1999-3 2249-3 2499-3 2749-3 2999-3 3248-3 3498-3
 1600-4 4993-4 9985-4 1498-3 1997-3 2247-3 2496-3 2746-3 2995-3 3245-3 3495-3
 2500-4 4983-4 9964-4 1494-3 1992-3 2242-3 2491-3 2740-3 2989-3 3238-3 3487-3
 3600-4 4964-4 9924-4 1488-3 1984-3 2232-3 2480-3 2728-3 2976-3 3224-3 3472-3
 4900-4 4932-4 9856-4 1478-3 1970-3 2217-3 2463-3 2709-3 2955-3 3201-3 3447-3
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 6400-4 4881-4 9747-4 1461-3 1948-3 2191-3 2434-3 2677-3 2920-3 3163-3 3406-3
 8100-4 4799-4 9576-4 1435-3 1912-3 2151-3 2389-3 2628-3 2866-3 3104-3 3343-3
 1000-3 4671-4 9302-4 1393-3 1856-3 2087-3 2318-3 2549-3 2779-3 3010-3 3241-3
QFREE   6466-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1 7291-1
HDN     4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3 8500-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3 8500-3
 4000-5 4000-3 4499-3 4999-3 5499-3 5999-3 6499-3 6999-3 7499-3 7999-3 8499-3
 9000-5 3998-3 4497-3 4997-3 5497-3 5997-3 6497-3 6997-3 7497-3 7997-3 8497-3
 1600-4 3994-3 4491-3 4991-3 5491-3 5991-3 6490-3 6990-3 7490-3 7990-3 8490-3
 2500-4 3985-3 4479-3 4978-3 5478-3 5977-3 6477-3 6976-3 7476-3 7976-3 8476-3
 3600-4 3968-3 4457-3 4955-3 5454-3 5953-3 6452-3 6951-3 7451-3 7950-3 8450-3
 4900-4 3939-3 4420-3 4917-3 5414-3 5912-3 6411-3 6909-3 7409-3 7908-3 8407-3
 6400-4 3892-3 4364-3 4858-3 5353-3 5850-3 6347-3 6846-3 7344-3 7843-3 8342-3
 8100-4 3819-3 4281-3 4772-3 5265-3 5760-3 6256-3 6753-3 7250-3 7748-3 8247-3
 1000-3 3701-3 4167-3 4652-3 5141-3 5634-3 6127-3 6623-3 7119-3 7616-3 8114-3
QFREE   7291-1 7291-1
HDN     9000-3 1000-2
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 9000-3 1000-2
 4000-5 8999-3 9999-3
 9000-5 8997-3 9997-3
 1600-4 8990-3 9990-3
 2500-4 8976-3 9976-3
 3600-4 8950-3 9949-3
 4900-4 8907-3 9906-3
 6400-4 8841-3 9840-3
 8100-4 8746-3 9744-3
 1000-3 8612-3 9609-3
TABLE#=  517
TYPE=  -14 HDATUM=  1256.650
LABEL=UD 8x4ENTR
NHDN=   19
NPFQ=   10
QFREE   3008-2 7643-2 1352-1 2043-1 2422-1 2822-1 3242-1 3681-1 4138-1 4613-1
HDN     5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
 4000-5 5003-4 1000-3 1501-3 2001-3 2251-3 2501-3 2751-3 3001-3 3251-3 3502-3
 9000-5 5012-4 1002-3 1503-3 2005-3 2255-3 2506-3 2756-3 3007-3 3258-3 3508-3
 1600-4 5037-4 1007-3 1511-3 2015-3 2266-3 2518-3 2770-3 3022-3 3274-3 3526-3
 2500-4 5093-4 1018-3 1527-3 2037-3 2291-3 2546-3 2801-3 3056-3 3311-3 3566-3
 3600-4 5206-4 1039-3 1560-3 2080-3 2340-3 2601-3 2861-3 3121-3 3382-3 3643-3
 4900-4 5425-4 1080-3 1621-3 2162-3 2432-3 2703-3 2973-3 3244-3 3516-3 3788-3
 6400-4 5837-4 1156-3 1734-3 2311-3 2600-3 2888-3 3178-3 3468-3 3759-3 4040-3
 8100-4 6583-4 1293-3 1933-3 2574-3 2894-3 3216-3 3539-3 3861-3 4138-3 4365-3
 1000-3 7797-4 1517-3 2259-3 3002-3 3376-3 3751-3 4094-3 4362-3 4604-3 4819-3
QFREE   5468-1 5468-1 5468-1 5468-1 5468-1 5468-1 5468-1 5468-1 5468-1
HDN     4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3
 4000-5 4002-3 4502-3 5002-3 5502-3 6002-3 6502-3 7002-3 7502-3 8002-3
 9000-5 4010-3 4510-3 5010-3 5510-3 6010-3 6510-3 7010-3 7510-3 8010-3
 1600-4 4031-3 4531-3 5031-3 5531-3 6031-3 6531-3 7031-3 7531-3 8031-3
 2500-4 4075-3 4575-3 5075-3 5575-3 6075-3 6575-3 7075-3 7575-3 8075-3
 3600-4 4155-3 4655-3 5155-3 5655-3 6155-3 6655-3 7155-3 7655-3 8155-3
 4900-4 4288-3 4788-3 5288-3 5788-3 6287-3 6787-3 7287-3 7787-3 8287-3
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 6400-4 4491-3 4991-3 5491-3 5991-3 6490-3 6990-3 7490-3 7990-3 8489-3
 8100-4 4787-3 5287-3 5786-3 6286-3 6786-3 7285-3 7785-3 8284-3 8784-3
 1000-3 5200-3 5700-3 6199-3 6698-3 7198-3 7697-3 8196-3 8696-3 9195-3
TABLE#=  518
TYPE=  -14 HDATUM=  1256.650
LABEL=DU 8x4ENTR
NHDN=   19
NPFQ=   10
QFREE   3207-2 6760-2 1165-1 1735-1 2049-1 2381-1 2728-1 3091-1 3473-1 3873-1
HDN     5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 5000-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
 4000-5 5001-4 1000-3 1500-3 2000-3 2250-3 2500-3 2750-3 3000-3 3250-3 3500-3
 9000-5 5002-4 9996-4 1499-3 1999-3 2249-3 2499-3 2749-3 2998-3 3248-3 3498-3
 1600-4 5004-4 9987-4 1498-3 1997-3 2246-3 2496-3 2745-3 2995-3 3244-3 3494-3
 2500-4 5010-4 9968-4 1494-3 1992-3 2241-3 2490-3 2738-3 2987-3 3236-3 3485-3
 3600-4 5022-4 9932-4 1488-3 1983-3 2230-3 2478-3 2725-3 2973-3 3221-3 3469-3
 4900-4 5042-4 9868-4 1477-3 1967-3 2212-3 2457-3 2702-3 2948-3 3194-3 3440-3
 6400-4 5079-4 9759-4 1457-3 1939-3 2180-3 2422-3 2663-3 2904-3 3147-3 3389-3
 8100-4 5142-4 9562-4 1423-3 1890-3 2124-3 2358-3 2592-3 2826-3 3063-3 3299-3
 1000-3 5258-4 9151-4 1350-3 1785-3 2004-3 2224-3 2443-3 2661-3 2883-3 3106-3
QFREE   4720-1 5468-1 5468-1 5468-1 5468-1 5468-1 5468-1 5468-1 5468-1
HDN     4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3
   PFQ          Ups heads for HDN and Proportion of QFREE
 1000-5 4000-3 4500-3 5000-3 5500-3 6000-3 6500-3 7000-3 7500-3 8000-3
 4000-5 4000-3 4499-3 4999-3 5499-3 5999-3 6499-3 6999-3 7499-3 7999-3
 9000-5 3998-3 4497-3 4997-3 5497-3 5997-3 6497-3 6997-3 7497-3 7997-3
 1600-4 3993-3 4490-3 4990-3 5490-3 5990-3 6490-3 6990-3 7490-3 7990-3
 2500-4 3982-3 4476-3 4976-3 5476-3 5976-3 6476-3 6976-3 7476-3 7976-3
 3600-4 3963-3 4450-3 4950-3 5450-3 5950-3 6450-3 6950-3 7450-3 7950-3
 4900-4 3931-3 4407-3 4907-3 5407-3 5907-3 6407-3 6907-3 7407-3 7907-3
 6400-4 3875-3 4341-3 4841-3 5342-3 5842-3 6342-3 6842-3 7342-3 7842-3
 8100-4 3773-3 4246-3 4746-3 5246-3 5746-3 6246-3 6747-3 7247-3 7747-3
 1000-3 3556-3 4112-3 4613-3 5113-3 5613-3 6113-3 6614-3 7114-3 7614-3
TABLE#=  501
TYPE=  -13 HDATUM=  1256.000
LABEL= FLOW INTO DROP STRUCTURE OUTLET OF BASIN 2A
NHUP=   21
NPFD=   20
HUP     1000-5 5000-5 1000-4 1500-4 2000-4 3000-4 4000-4 5000-4 6000-4 7000-4
FDROP   1992-6 9961-6 2002-5 2998-5 4004-5 5996-5 7998-5 1000-4 1200-4 1400-4
   PFD          Flows for HUP and Proportion of FDROP
 2500-6 0000+0 0000+0 0000+0 6646-5 7675-5 9407-5 2173-4 2431-4 2665-4 4320-4
 1000-5 0000+0 3836-5 1085-4 1329-4 2302-4 4703-4 7607-4 9725-4 1332-3 1584-3
 2250-5 0000+0 7673-5 2169-4 3987-4 5372-4 1035-3 1630-3 2188-3 2931-3 3744-3
 4000-5 1715-5 1151-4 3796-4 6646-4 9977-4 1881-3 2825-3 4012-3 5196-3 6624-3
 6250-5 1715-5 1918-4 5423-4 9968-4 1535-3 2916-3 4455-3 6199-3 8126-3 1037-2
 9000-5 1715-5 2611-4 7683-4 1394-3 2174-3 3945-3 6096-3 8541-3 1117-2 1411-2
 1225-4 2714-5 3035-4 8573-4 1576-3 2426-3 4461-3 6871-3 9607-3 1263-2 1596-2
 1600-4 3125-5 3311-4 9354-4 1720-3 2647-3 4890-3 7523-3 1051-2 1382-2 1745-2
 2025-4 3125-5 3661-4 1025-3 1891-3 2902-3 5336-3 8237-3 1151-2 1513-2 1908-2
 2500-4 3438-5 3845-4 1095-3 2008-3 3098-3 5698-3 8775-3 1227-2 1614-2 2034-2
 3025-4 3705-5 4144-4 1170-3 2145-3 3304-3 6081-3 9358-3 1309-2 1721-2 2170-2
 3600-4 3889-5 4308-4 1223-3 2245-3 3460-3 6363-3 9801-3 1370-2 1802-2 2272-2
 4225-4 4042-5 4495-4 1273-3 2343-3 3608-3 6631-3 1021-2 1427-2 1877-2 2367-2
 4900-4 4154-5 4646-4 1312-3 2413-3 3718-3 6835-3 1052-2 1471-2 1936-2 2440-2
 5625-4 4238-5 4757-4 1344-3 2470-3 3802-3 6992-3 1077-2 1506-2 1981-2 2497-2
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6400-4	4311-5	4844-4	1370-3	2518-3	3876-3	7126-3	1098-2	1535-2	2018-2	2545-2
7225-4	4405-5	4919-4	1389-3	2554-3	3933-3	7232-3	1114-2	1557-2	2048-2	2582-2
8100-4	4438-5	4970-4	1405-3	2582-3	3975-3	7308-3	1126-2	1574-2	2070-2	2609-2
9025-4	4489-5	5018-4	1417-3	2606-3	4010-3	7375-3	1136-2	1588-2	2089-2	2633-2
1000-3	4501-5	5033-4	1421-3	2613-3	4022-3	7397-3	1139-2	1593-2	2095-2	2641-2
HUP	8000-4	9000-4	1000-3	2000-3	3000-3	4000-3	5000-3	6000-3	7000-3	8000-3
FDROP	1600-4	1800-4	2000-4	4000-4	6000-4	8000-4	1000-3	1200-3	1400-3	1600-3

PFD Flows for HUP and Proportion of FDROP

2500-6	4621-4	6539-4	6896-4	2013-3	3762-3	5888-3	8364-3	1164-2	1482-2	1831-2
1000-5	2002-3	2452-3	2758-3	8306-3	1536-2	2429-2	3429-2	4563-2	5875-2	7268-2
2250-5	4467-3	5394-3	6379-3	1862-2	3480-2	5410-2	7695-2	1029-1	1318-1	1637-1
4000-5	8010-3	9644-3	1138-2	3297-2	6176-2	9642-2	1372-1	1830-1	2345-1	2907-1
6250-5	1263-2	1503-2	1758-2	5156-2	9615-2	1507-1	2138-1	2854-1	3656-1	4534-1
9000-5	1728-2	2065-2	2412-2	7054-2	1316-1	2061-1	2925-1	3907-1	4999-1	6203-1
1225-4	1951-2	2329-2	2728-2	7956-2	1486-1	2325-1	3302-1	4408-1	5641-1	6998-1
1600-4	2132-2	2544-2	2981-2	8699-2	1624-1	2542-1	3609-1	4819-1	6167-1	7649-1
2025-4	2332-2	2786-2	3264-2	9526-2	1778-1	2782-1	3950-1	5275-1	6749-1	8372-1
2500-4	2487-2	2969-2	3479-2	1015-1	1895-1	2965-1	4210-1	5621-1	7192-1	8922-1
3025-4	2652-2	3167-2	3712-2	1083-1	2022-1	3163-1	4492-1	5997-1	7674-1	9518-1
3600-4	2778-2	3316-2	3886-2	1134-1	2117-1	3312-1	4702-1	6277-1	8033-1	9963-1
4225-4	2894-2	3454-2	4048-2	1181-1	2205-1	3450-1	4898-1	6539-1	8367-1	1038+0
4900-4	2983-2	3561-2	4173-2	1218-1	2273-1	3556-1	5049-1	6741-1	8625-1	1070+0
5625-4	3053-2	3644-2	4271-2	1246-1	2326-1	3639-1	5167-1	6898-1	8826-1	1095+0
6400-4	3111-2	3714-2	4352-2	1270-1	2371-1	3709-1	5265-1	7029-1	8994-1	1115+0
7225-4	3157-2	3768-2	4416-2	1288-1	2405-1	3763-1	5342-1	7131-1	9125-1	1132+0
8100-4	3190-2	3808-2	4462-2	1302-1	2431-1	3802-1	5398-1	7206-1	9220-1	1144+0
9025-4	3219-2	3843-2	4503-2	1314-1	2453-1	3837-1	5447-1	7272-1	9305-1	1154+0
1000-3	3229-2	3854-2	4516-2	1318-1	2460-1	3848-1	5463-1	7293-1	9332-1	1157+0
HUP	1000-2									
FDROP	2000-3									

PFD Flows for HUP and Proportion of FDROP

2500-6	2622-2
1000-5	1049-1
2250-5	2360-1
4000-5	4190-1
6250-5	6532-1
9000-5	8928-1
1225-4	1008+0
1600-4	1101+0
2025-4	1205+0
2500-4	1284+0
3025-4	1370+0
3600-4	1434+0
4225-4	1494+0
4900-4	1540+0
5625-4	1576+0
6400-4	1606+0
7225-4	1629+0
8100-4	1646+0
9025-4	1661+0
1000-3	1666+0

```
* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* XSEC.TAB

TABLE#=  100
TYPE=  -22
STATION= 9.55000E+02
ELEVATION= 1.25800E+03                    EXT=-99.9      FAC=1.000
```

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA	FIRST MOMENT	ALPHA	
0.00000	30.000	0.00000E+00	0.00000E+00	1.0000	0.00000E+00	1.0000	0.00
0.07996	30.160	2.40507E+00	6.43694E+00	1.0000	9.60649E-02	1.0000	3.85
0.87500	31.750	2.70156E+01	4.71733E+01	1.0000	1.17077E+01	1.0000	1.41
1.75000	33.500	5.55625E+01	8.39531E+01	1.0000	4.77240E+01	1.0000	4.06
2.62500	35.250	8.56406E+01	1.17683E+02	1.0000	1.09389E+02	1.0000	7.57
3.50000	37.000	1.17250E+02	1.49671E+02	1.0000	1.98042E+02	1.0000	1.18
4.37500	38.750	1.50391E+02	1.80516E+02	1.0000	3.15023E+02	1.0000	1.68
5.25000	40.500	1.85063E+02	2.10562E+02	1.0000	4.61672E+02	1.0000	2.24
6.12500	42.250	2.21266E+02	2.40031E+02	1.0000	6.39329E+02	1.0000	2.87
7.00000	44.000	2.59000E+02	2.69077E+02	1.0000	8.49333E+02	1.0000	3.56
7.97144	44.000	3.01743E+02	3.05603E+02	1.0000	1.12170E+03	1.0000	4.48
8.94287	44.000	3.44486E+02	3.41274E+02	1.0000	1.43558E+03	1.0000	5.46
9.91431	44.000	3.87229E+02	3.76213E+02	1.0000	1.79099E+03	1.0000	6.51
10.88574	44.000	4.29973E+02	4.10513E+02	1.0000	2.18792E+03	1.0000	7.62
11.85718	44.000	4.72716E+02	4.44249E+02	1.0000	2.62637E+03	1.0000	8.79
12.82861	44.000	5.15459E+02	4.77480E+02	1.0000	3.10634E+03	1.0000	1.00
13.80005	44.000	5.58202E+02	5.10254E+02	1.0000	3.62784E+03	1.0000	1.12
14.77148	44.000	6.00945E+02	5.42611E+02	1.0000	4.19086E+03	1.0000	1.26
15.74292	44.000	6.43688E+02	5.74588E+02	1.0000	4.79540E+03	1.0000	1.39
16.71436	44.000	6.86432E+02	6.06212E+02	1.0000	5.44146E+03	1.0000	1.53
17.68579	44.000	7.29175E+02	6.37509E+02	1.0000	6.12905E+03	1.0000	1.68
18.65723	44.000	7.71918E+02	6.68502E+02	1.0000	6.85816E+03	1.0000	1.83
19.62866	44.000	8.14661E+02	6.99209E+02	1.0000	7.62879E+03	1.0000	1.98
20.60010	44.000	8.57404E+02	7.29650E+02	1.0000	8.44094E+03	1.0000	2.14
21.57153	44.000	9.00147E+02	7.59838E+02	1.0000	9.29461E+03	1.0000	2.31
22.54297	44.000	9.42891E+02	7.89789E+02	1.0000	1.01898E+04	1.0000	2.47
23.51440	44.000	9.85634E+02	8.19514E+02	1.0000	1.11265E+04	1.0000	2.64
24.48584	44.000	1.02838E+03	8.49024E+02	1.0000	1.21048E+04	1.0000	2.82
25.45728	44.000	1.07112E+03	8.78331E+02	1.0000	1.31245E+04	1.0000	2.99
26.42871	44.000	1.11386E+03	9.07444E+02	1.0000	1.41858E+04	1.0000	3.18
27.40015	44.000	1.15661E+03	9.36371E+02	1.0000	1.52886E+04	1.0000	3.36
28.37158	44.000	1.19935E+03	9.65120E+02	1.0000	1.64330E+04	1.0000	3.55
29.34302	44.000	1.24209E+03	9.93699E+02	1.0000	1.76188E+04	1.0000	3.74
30.31445	44.000	1.28484E+03	1.02211E+03	1.0000	1.88462E+04	1.0000	3.93
31.28589	44.000	1.32758E+03	1.05037E+03	1.0000	2.01151E+04	1.0000	4.13
32.25732	44.000	1.37032E+03	1.07848E+03	1.0000	2.14255E+04	1.0000	4.33
33.22876	44.000	1.41307E+03	1.10644E+03	1.0000	2.27774E+04	1.0000	4.54
34.20020	44.000	1.45581E+03	1.13426E+03	1.0000	2.41709E+04	1.0000	4.75
35.17163	44.000	1.49855E+03	1.16195E+03	1.0000	2.56059E+04	1.0000	4.96
36.14307	44.000	1.54129E+03	1.18950E+03	1.0000	2.70824E+04	1.0000	5.17
37.11450	44.000	1.58404E+03	1.21693E+03	1.0000	2.86004E+04	1.0000	5.39
38.08594	44.000	1.62678E+03	1.24423E+03	1.0000	3.01600E+04	1.0000	5.61
39.05737	44.000	1.66952E+03	1.27141E+03	1.0000	3.17610E+04	1.0000	5.83
40.02881	44.000	1.71227E+03	1.29848E+03	1.0000	3.34036E+04	1.0000	6.06
41.00000	44.000	1.75500E+03	1.32543E+03	1.0000	3.50873E+04	1.0000	6.28

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      -1.
TABLE#=  101
TYPE=  -22
```

STATION= 1.90000E+02
ELEVATION= 1.25200E+03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA	FIRST MOMENT	ALPHA	
0.00000	13.000	0.00000E+00	0.00000E+00	1.0000	0.00000E+00	1.0000	0.00
0.07996	13.160	1.04582E+00	3.09340E+00	1.0000	4.17247E-02	1.0000	1.67
0.87500	14.750	1.21406E+01	2.26477E+01	1.0000	5.19987E+00	1.0000	6.25
1.75000	16.500	2.58125E+01	4.04146E+01	1.0000	2.16927E+01	1.0000	1.83
2.62500	18.250	4.10156E+01	5.69428E+01	1.0000	5.08184E+01	1.0000	3.48
3.50000	20.000	5.77500E+01	7.28983E+01	1.0000	9.39167E+01	1.0000	5.56
4.37500	21.750	7.60156E+01	8.85768E+01	1.0000	1.52327E+02	1.0000	8.06
5.25000	23.500	9.58125E+01	1.04139E+02	1.0000	2.27391E+02	1.0000	1.09
6.12500	25.250	1.17141E+02	1.19681E+02	1.0000	3.20446E+02	1.0000	1.43
7.00000	27.000	1.40000E+02	1.35265E+02	1.0000	4.32833E+02	1.0000	1.80
7.85718	37.429	1.67614E+02	1.43186E+02	1.0000	5.64034E+02	1.0000	2.01
8.71436	47.858	2.04167E+02	1.56937E+02	1.0000	7.22737E+02	1.0000	2.39
9.57153	58.287	2.49659E+02	1.74833E+02	1.0000	9.16603E+02	1.0000	2.93
10.42871	68.716	3.04091E+02	1.95901E+02	1.0000	1.15330E+03	1.0000	3.62
11.28589	79.145	3.67463E+02	2.19522E+02	1.0000	1.44048E+03	1.0000	4.49
12.14307	89.574	4.39774E+02	2.45271E+02	1.0000	1.78581E+03	1.0000	5.52
13.00000	100.000	5.21000E+02	2.72837E+02	1.0000	2.19683E+03	1.0000	6.74

-1.

TABLE#= 102
TYPE= -22
STATION= 1.60000E+02
ELEVATION= 1.25160E+03 EXT=-99.9 FAC=1.000

DEPTH	TOP WIDTH	AREA	SQRT(CONV)	BETA	FIRST MOMENT	ALPHA	
0.00000	12.000	0.00000E+00	0.00000E+00	1.0000	0.00000E+00	1.0000	0.00
0.07996	12.060	9.61870E-01	2.96604E+00	1.0000	3.84217E-02	1.0000	1.54
0.87500	12.656	1.07871E+01	2.12808E+01	1.0000	4.67749E+00	1.0000	5.65
1.75000	13.313	2.21484E+01	3.71503E+01	1.0000	1.90449E+01	1.0000	1.62
2.62500	13.969	3.40840E+01	5.12452E+01	1.0000	4.36047E+01	1.0000	3.02
3.50000	14.625	4.65938E+01	6.42894E+01	1.0000	7.88594E+01	1.0000	4.71
4.37500	15.281	5.96777E+01	7.66298E+01	1.0000	1.25311E+02	1.0000	6.69
5.25000	15.938	7.33359E+01	8.84697E+01	1.0000	1.83463E+02	1.0000	8.92
6.12500	16.594	8.75684E+01	9.99409E+01	1.0000	2.53817E+02	1.0000	1.14
7.00000	17.250	1.02375E+02	1.11135E+02	1.0000	3.36875E+02	1.0000	1.41
7.91431	29.072	1.23551E+02	1.15045E+02	1.0000	4.39334E+02	1.0000	1.44
8.82861	40.893	1.55536E+02	1.27486E+02	1.0000	5.66096E+02	1.0000	1.72
9.74292	52.715	1.98329E+02	1.45514E+02	1.0000	7.27043E+02	1.0000	2.18
10.65723	64.537	2.51931E+02	1.67607E+02	1.0000	9.32058E+02	1.0000	2.82
11.57153	76.358	3.16342E+02	1.92856E+02	1.0000	1.19102E+03	1.0000	3.65
12.48584	88.180	3.91561E+02	2.20677E+02	1.0000	1.51382E+03	1.0000	4.68
13.40002	100.000	4.77576E+02	2.50661E+02	1.0000	1.91027E+03	1.0000	5.92

-1.

EXHIBIT A-5

FEQUTL INPUT FILES

```
* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* MULCON.FTL

STDIN=      5
STDOUT=     6
STDTAB=     7
UNITS=  ENGLISH
NCMD=      16
FEQX        1
FLOODWAY    2
BRIDGE      3
CULVERT     4
FINISH      5
SAME        6
FEQXLST     8
ROADWAY     9
SEWER      10
MULPIPES   11
FTABIN     12
EMBANKQ    13
JUMP       14
CRITQ      15
GRITTER    16
MULCON     18
DZLIM= 1.0
NRZERO= 0.08
USGSBETA=YES
EPSARG= 0.0005
EPSF=  0.001
EXTEND=NO

            THIS FILE CONTAINS THE FEQ UTILITY (FEQUTL) INPUTS
            REQUIRED TO DEVELOP THE CROSS SECTION ELEMENT TABLES
            FOR THE CLOSED CONDUITS IN THE TENTH STREET BASIN MODEL
            LAST UPDATE 5/22/95


MULCON
TABLE#=   24   OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=1
TYPE=      CIRC
SPAN=       2.0
RISE=
BOTT=       0.0
ROUG=     0.013

MULCON
TABLE#=   30   OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=1
TYPE=      CIRC
SPAN=       2.5
RISE=
```

```
BOTT=        0.0
ROUG=      0.013


MULCON
TABLE#=   36   OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=1
TYPE=       CIRC
SPAN=        3.0
RISE=
BOTT=        0.0
ROUG=      0.013


MULCON
TABLE#=   42   OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=1
TYPE=       CIRC
SPAN=        3.5
RISE=
BOTT=        0.0
ROUG=      0.013


MULCON
TABLE#=   48   OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=1
TYPE=       CIRC
SPAN=        4.0
RISE=
BOTT=        0.0
ROUG=      0.013

***  TWIN 60-INCH PIPES
***  MODELED USING n = 0.014 TO ACCOUNT FOR FOUR - 45 DEGREE BENDS

MULCON
TABLE#=  260      OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES= 2
TYPE=      CIRC      CIRC
SPAN=      5.00      5.00
RISE=
BOTT=       0.0       0.0
ROUG=     0.014     0.014


***  TWIN 4 X 6 FOOT BOX CULVERTS

MULCON
```

```
TABLE#=  106  OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=2
TYPE=      BOX      BOX
SPAN=      6.0      6.0
RISE=      4.0      4.0
BOTT=      0.0      0.0
ROUG=    0.013    0.013


******** THE FOLLOWING TABLES WERE USED ONLY FOR TRIAL DESIGNS AND
******** DO NOT APPEAR IN ALTERNATIVE C1A

***  TWIN 66-INCH PIPES
***  MODELED USING n = 0.014 TO ACCOUNT FOR FOUR - 45 DEGREE BENDS

MULCON
TABLE#=  266      OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=2
TYPE=     CIRC     CIRC
SPAN=     5.50     5.50
RISE=
BOTT=      0.0      0.0
ROUG=    0.014    0.014

***  TWIN 72-INCH PIPES
***  MODELED USING n = 0.014 TO ACCOUNT FOR FOUR - 45 DEGREE BENDS

MULCON
TABLE#=  272      OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=2
TYPE=     CIRC     CIRC
SPAN=     6.00     6.00
RISE=
BOTT=      0.0      0.0
ROUG=    0.014    0.014

***  TWIN 4 X 10 FOOT BOX CULVERTS

MULCON
TABLE#=  104  OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=2
TYPE=      BOX      BOX
SPAN=     10.0     10.0
RISE=      4.0      4.0
BOTT=      0.0      0.0
ROUG=    0.013    0.013

***  TWIN 4 X 8 FOOT BOX CULVERTS
```

```
MULCON
TABLE#=  108  OUT20
WSLOT=0.01
HSLOT=50.0
NPIPES=2
TYPE=      BOX      BOX
SPAN=      8.0      8.0
RISE=      4.0      4.0
BOTT=      0.0      0.0
ROUG=    0.013    0.013
FINISH
```

```
* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* TWOD.FTL

STDIN=       5
STDOUT=      6
STDTAB=      7
UNITS=  ENGLISH
NCMD=       20
FEQX         1
FLOODWAY     2
BRIDGE       3
CULVERT      4
FINISH       5
SAME         6
FEQXLST      8
ROADFLOW     9
SEWER       10
MULPIPES    11
FTABIN      12
EMBANKQ     13
JUMP        14
CRITQ       15
GRITTER     16
MULCON      18
CHANRAT     19
EXPCON      20
HEC2X       21
QCLIMIT     22
DZLIM= 1.00
NRZERO= 0.08
USGSBETA=NO
EPSARG=5.E-4
EPSF=1.E-4
EXTEND=NO

FTABIN
TABLE#=  -15WEIRTABS
TABLE#=  -15SHRPTABS
TABLE#= -1

*  THIS FILE CONTAINS FEQUTL INPUT USED TO COMPUTE THE
*  TWO DIMENSIONAL TABLES IN THE TENTH STREET WASH FEQ MODEL
*
*  INPUT FOR MAIN DIVERSION WEIR
*
EMBANKQ
TABLE#=  500
PLCWTB= 9994
GLCWTB= 9995
PHCWTB= 9996
GHCWTB= 9997
PSUBTB= 9998
GSUBTB= 9999
LABEL= FLOW OVER SIDE FLOW WEIR CREST INTO BASIN 2A
    OFFSET     CREST    WIDTH  APPROACH SURFACE
     -72.0   1280.00        8.    -99.99 PAVED
```

```
     -71.0   1260.30        4.    -99.99 PAVED
      71.0   1260.30        4.    -99.99 PAVED
      72.0   1280.00        8.           END
UPSTREAM HEADS TO USE IN COMPUTING THE TABLE
0.01
0.05
0.10
0.15
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1.0
2.0
3.0
4.0
5.0
6.0
10.0
-1.


FEQX
TABLE#=  100  SAVE22 NOOUT
STATION= 000.00
NAVM=00000 SCALE=       1.0 SHIFT=
NSUB    3     0.001     0.016     0.001
OPEN CHANNEL CROSS SECTION - 30 FEET BOTTOM WIDTH 1:1 SIDE SLOPES
     -22.0   1299.00    1 VERTICAL WALL
     -22.0   1265.00    2
     -15.0   1258.00    2
      15.0   1258.00    2
      22.0   1265.00    3
      22.0   1299.00   -1 IMAGINARY VERTICAL WALL


***  ANALYSIS OF CONTRACTION FROM TRAPEZOIDAL CHANNEL INTO TWIN
***  4 BY 8 BOX CULVERTS

MULCON
TABLE#=  408     SAVE22   NOOUT
WSLOT=0.01
HSLOT=50.0
NPIPES=  2
TYPE=       BOX       BOX
SPAN=       8.0       8.0
RISE=       4.0       4.0
BOTT=       0.0       0.0
ROUG=     0.013     0.013


QCLIMIT
TABLE#=  408
```

```
EXPCON
CROSS SECTION TABLES
 LOC TAB# DIST     DATUM
  UP  100  0.0   1256.65
  DN  408  1.0   1256.65
COEFFICIENTS AND OUTPUT TABLES
 DIR TAB#   KA   KD LABEL
  UD  515  0.2  0.8 UD 8x4ENTR
  DU  516  0.2  0.8 DU 8x4ENTR
SMOOTH=0.1
GMEAN= 0.5
DOWNSTREAM HEAD SEQUENCE FOR THE TABLE
NFRAC= 11
POWER= 2.
.50
1.0
1.5
2.0
2.25
2.5
2.75
3.0
3.25
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
10.0
-1.0


***  ANALYSIS OF SMOOTH CONTRACTION FROM TWIN 4 BY 8 BOX CULVERTS
***  INTO TWIN 4 BY 6 CULVERTS


MULCON
TABLE#=  406     SAVE22   NOOUT
WSLOT=0.01
HSLOT=50.0
NPIPES=  2
TYPE=       BOX       BOX
SPAN=       6.0       6.0
RISE=       4.0       4.0
BOTT=       0.0       0.0
ROUG=     0.013     0.013
```

```
QCLIMIT
TABLE#=  406

EXPCON
CROSS SECTION TABLES
 LOC TAB# DIST     DATUM
  UP  408  0.0   1256.65
  DN  406 10.0   1256.57
COEFFICIENTS AND OUTPUT TABLES
 DIR TAB#   KA   KD LABEL
  UD  517  0.3  0.5 UD 8x4ENTR
  DU  518  0.3  0.5 DU 8x4ENTR
SMOOTH=0.1
GMEAN= 0.5
DOWNSTREAM HEAD SEQUENCE FOR THE TABLE
NFRAC= 11
POWER= 2.
.50
1.0
1.5
2.0
2.25
2.5
2.75
3.0
3.25
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
-1.0


*** THE FOLOWING TABLE WAS NOT USED IN THE FINAL MODEL

EMBANKQ
TABLE#=  501
PLCWTB= 9974
GLCWTB= 9995
PHCWTB= 9976
GHCWTB= 9997
PSUBTB= 9998
GSUBTB= 9999
LABEL= FLOW INTO DROP STRUCTURE OUTLET OF BASIN 2A
    OFFSET     CREST     DEPTH  APPROACH SURFACE
       0.0   1280.00        8.    -99.99 PAVED
       0.5   1256.00
      14.5   1256.00
      15.0   1280.00                     END
UPSTREAM HEADS TO USE IN COMPUTING THE TABLE
0.01
```

```
0.05
0.10
0.15
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
10.0
-1.

FINISH
```

```
* FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
* FEQ HYDRAULIC MODEL
* XSEC.FTL

STDIN=       5
STDOUT=      6
STDTAB=      7
UNITS=  ENGLISH
NCMD=       18
FEQX         1
FLOODWAY     2
BRIDGE       3
CULVERT      4
FINISH       5
SAME         6
FEQXLST      8
ROADWAY      9
SEWER       10
MULPIPES    11
FTABIN      12
EMBANKQ     13
JUMP        14
CRITQ       15
GRITTER     16
MULCON      18
CHANRAT     19
EXPCON      20
DZLIM= 1.0
NRZERO= 0.08
USGSBETA=NO
EPSARG= 0.0005
EPSF=  0.001
EXTEND=NO


FEQX
TABLE#=  100  OUT22
STATION= 955.00
NAVM=00000 SCALE=       1.0 SHIFT=
NSUB    3     0.001     0.016     0.001
OPEN CHANNEL CROSS SECTION - 30 FEET BOTTOM WIDTH 1:1 SIDE SLOPES
     -22.0   1299.00    1 FRICTIONLESS VERTICAL WALL
     -22.0   1265.00    2
     -15.0   1258.00    2
      15.0   1258.00    2
      22.0   1265.00    3
      22.0   1299.00   -1 IMAGINARY VERTICAL WALL


FEQX
TABLE#=  101  OUT22
STATION= 190.00
NAVM=00000 SCALE=       1.0 SHIFT=
NSUB    1     0.030
RIP RAP OPEN CHANNEL CROSS SECTION - 13 FEET BOTTOM WIDTH WITH 1:1 SIDE SLOPES
     -50.0   1265.00    1 ASSUMED OVERBANK
     -13.5   1259.00    1 SEVEN FEET DEEP
```

```
      -6.5   1252.00    1
       6.5   1252.00    1
      13.5   1259.00    1 SEVEN FEET DEEP
      50.0   1265.00   -1 ASSUMED OVERBANK AREA


FEQX
TABLE#=  102  OUT22
STATION= 160.00
NAVM=00000 SCALE=       1.0 SHIFT=
NSUB    1     0.030
NATURAL OPEN CHANNEL CROSS SECTION - 12 FEET BOTTOM WIDTH
     -50.0   1265.00    1 ASSUMED OVERBANK
      -9.5   1258.60    1 2:1 SIDE SLOPE
      -6.0   1251.60    1
       6.0   1251.60    1
      7.75   1258.60    1 4:1 SIDE SLOPE
      50.0   1265.00   -1 ASSUMED OVERBANK AREA

FINISH
```

EXHIBIT A-6

MAXIMUM MODELED FLOWS AND STAGES

SIMULATION COMPLETED
1SUMMARY OF EXTREME ELEVATIONS AND FLOWS

FLOOD CONTROL DIST OF MARICOPA CTY TENTH STREET WASH DETENTION BASIN NO. 2
USES TWIN 8 BY 4 OPENINGS AS BYPASS CONTROL WITH TWIN 6 BY 4 DWNSTRM
18 BY 16 GRATE, NO CLOGGING TWIN 60-IN EQLZERS 9/14/95 FILE: C1A.FEQ

EXTREMES ACHIEVED BY TIME 86400.

BRANCH NUMBER = 1

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
100	US60	0.	13.8663	1262.3663	18.1496	7.1583E+02	-4.0550E+01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
101		41.	13.2007	1261.6506	18.1573	7.1583E+02	-4.0550E+01	80/ 1/ 1: 4.550	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
102		82.	12.5876	1260.9877	18.1650	7.1583E+02	-4.0549E+01	80/ 1/ 1: 4.600	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
103		122.	12.0016	1260.3516	18.1727	7.1582E+02	-4.0549E+01	80/ 1/ 1: 4.650	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
104		163.	11.4713	1259.7714	18.1804	7.1582E+02	-4.0549E+01	80/ 1/ 1: 4.700	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
105		204.	11.0468	1259.2968	18.1882	7.1582E+02	-4.0548E+01	80/ 1/ 1: 4.800	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
106		245.	10.7764	1258.9763	18.1959	7.1582E+02	-4.0548E+01	80/ 1/ 1: 4.900	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
107		286.	10.6210	1258.7710	18.2036	7.1582E+02	-4.0548E+01	80/ 1/ 1: 5.000	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
108		326.	10.5789	1258.6788	18.2114	7.1582E+02	-4.0548E+01	80/ 1/ 1: 5.100	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
109		367.	10.5974	1258.6475	18.2192	7.1582E+02	-4.0547E+01	80/ 1/ 1: 5.150	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
110	DS60	408.	10.6415	1258.6415	18.2269	7.1582E+02	-4.0547E+01	80/ 1/ 1: 5.200	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900

BRANCH NUMBER = 2

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
200	US36	0.	15.9104	1263.1604	11.8639	8.5368E+01	3.4692E-02	80/ 1/ 1: 4.450	80/ 1/ 1: 4.350	80/ 1/ 1: 0.050
201		72.	14.8938	1262.0057	11.8808	8.5367E+01	3.4749E-02	80/ 1/ 1: 4.500	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
202		144.	13.8850	1260.8590	11.8978	8.5367E+01	3.4749E-02	80/ 1/ 1: 4.500	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
203		216.	12.8763	1259.7123	11.9148	8.5366E+01	3.4749E-02	80/ 1/ 1: 4.500	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
204		288.	11.8676	1258.5656	11.9319	8.5365E+01	3.4750E-02	80/ 1/ 1: 4.500	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
205		360.	10.8588	1257.4188	11.9491	8.5364E+01	3.4754E-02	80/ 1/ 1: 4.500	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
206		431.	9.8528	1256.2748	11.9662	8.5363E+01	3.4765E-02	80/ 1/ 1: 4.550	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
207		503.	8.8540	1255.1381	11.9835	8.5362E+01	3.4787E-02	80/ 1/ 1: 4.550	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
208		575.	7.8552	1254.0012	12.0007	8.5361E+01	3.4830E-02	80/ 1/ 1: 4.550	80/ 1/ 1: 4.350	80/ 1/ 1: 0.350
209		647.	6.8563	1252.8644	12.0181	8.5360E+01	3.4874E-02	80/ 1/ 1: 4.550	80/ 1/ 1: 4.350	80/ 1/ 1: 0.400
210	DS36	719.	5.8610	1251.7310	12.0354	8.5359E+01	3.4878E-02	80/ 1/ 1: 4.600	80/ 1/ 1: 4.350	80/ 1/ 1: 0.400

BRANCH NUMBER = 3

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
300	US24B	0.	6.5880	1254.0880	14.1381	4.5032E+01	-5.8120E+00	80/ 1/ 1: 5.050	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
301		12.	6.2457	1253.6670	14.1550	4.5032E+01	-5.8284E+00	80/ 1/ 1: 4.850	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
302		23.	5.9868	1253.3293	14.1719	4.5032E+01	-5.8442E+00	80/ 1/ 1: 4.800	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
303		35.	5.7562	1253.0200	14.1888	4.5032E+01	-5.8592E+00	80/ 1/ 1: 4.750	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
304		47.	5.5420	1252.7271	14.2058	4.5032E+01	-5.8733E+00	80/ 1/ 1: 4.700	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
305		58.	5.3473	1252.4535	14.2228	4.5032E+01	-5.8859E+00	80/ 1/ 1: 4.700	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
306		70.	5.1721	1252.1996	14.2399	4.5032E+01	-5.8965E+00	80/ 1/ 1: 4.650	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
307		81.	5.0052	1251.9540	14.2570	4.5032E+01	-5.9039E+00	80/ 1/ 1: 4.600	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
308	DS24B	93.	4.8610	1251.7310	14.2741	4.5032E+01	-5.9068E+00	80/ 1/ 1: 4.600	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019

BRANCH NUMBER = 4

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
400	US48	719.	6.8610	1251.7310	9.5148	1.1975E+02	1.1796E-01	80/ 1/ 1: 4.600	80/ 1/ 1: 4.950	80/ 1/ 1: 0.400
401		762.	6.6464	1251.4628	9.5166	1.1975E+02	1.1797E-01	80/ 1/ 1: 4.550	80/ 1/ 1: 4.950	80/ 1/ 1: 0.400
402		804.	6.4351	1251.1978	9.5185	1.1976E+02	1.1799E-01	80/ 1/ 1: 4.550	80/ 1/ 1: 4.950	80/ 1/ 1: 0.400
403		847.	6.2238	1250.9329	9.5203	1.1976E+02	1.1802E-01	80/ 1/ 1: 4.550	80/ 1/ 1: 4.950	80/ 1/ 1: 0.400
404		889.	6.0123	1250.6678	9.5222	1.1976E+02	1.1806E-01	80/ 1/ 1: 4.550	80/ 1/ 1: 4.950	80/ 1/ 1: 0.400
405		932.	5.8011	1250.4030	9.5240	1.1976E+02	1.1807E-01	80/ 1/ 1: 4.550	80/ 1/ 1: 4.950	80/ 1/ 1: 0.450
406		974.	5.5909	1250.1392	9.5259	1.1976E+02	1.1807E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.950	80/ 1/ 1: 0.450
407		1017.	5.3870	1249.8815	9.7321	1.1976E+02	1.1808E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.950	80/ 1/ 1: 0.450
408		1059.	5.1829	1249.6238	10.2810	1.1976E+02	1.1812E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.950	80/ 1/ 1: 0.450
409		1102.	4.9789	1249.3662	11.1143	1.1979E+02	1.1816E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.950	80/ 1/ 1: 0.450
410		1144.	4.7749	1249.1085	12.5912	1.1986E+02	1.1820E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.950	80/ 1/ 1: 0.500
411	DS48	1187.	4.5708	1248.8508	19.3452	1.1995E+02	1.1818E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.950	80/ 1/ 1: 0.500

BRANCH NUMBER = 11

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
1100	TOWNLEY	970.	6.0828	1263.0828	7.8153	1.2189E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.050
1101		948.	6.1243	1263.0823	7.7624	1.2183E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.050
1102		926.	6.1658	1263.0818	7.7088	1.2178E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.050
1103		904.	6.2073	1263.0813	7.6546	1.2172E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.050
1104		882.	6.2488	1263.0808	7.6003	1.2166E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.100
1105	DIVRSION	860.	6.2902	1263.0802	7.5462	1.2159E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.150

BRANCH NUMBER = 12

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
1200	DIVRSION	860.	6.4956	1263.2856	2.4351	5.7727E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1201		846.	6.5233	1263.2854	2.4227	5.7722E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1202		832.	6.5511	1263.2852	2.4106	5.7718E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1203		818.	6.5789	1263.2849	2.3992	5.7713E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.350
1204		804.	6.6067	1263.2847	2.3879	5.7709E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1205	HEADWALL	790.	6.6344	1263.2844	2.3768	5.7704E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200

BRANCH NUMBER = 14

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q

1400	US 6BY 4	780.	4.4176	1260.9875	12.9709	5.7704E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	3.250
1401		727.	4.3790	1260.5336	12.8989	5.7704E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	3.150
1402		675.	4.3405	1260.0795	12.8222	5.7705E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	3.150
1403		622.	4.3018	1259.6254	12.7296	5.7707E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.100
1404		569.	4.2631	1259.1713	12.5950	5.7709E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.100
1405		516.	4.2245	1258.7172	12.4461	5.7711E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	3.169
1406		464.	4.1858	1258.2631	12.2344	5.7713E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.150
1407		411.	4.1472	1257.8090	12.0232	5.7715E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.150
1408		358.	4.1084	1257.3547	12.0235	5.7716E+02	1.0000E+00	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.150
1409		305.	4.0697	1256.9006	12.0237	5.7715E+02	9.9999E-01	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.150
1410		253.	4.0310	1256.4464	12.0236	5.7714E+02	9.9999E-01	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.150
1411	DS 6BY 4	200.	3.9923	1255.9923	12.0465	5.7710E+02	9.9999E-01	80/	1/	1:	4.450	80/	1/	1:	4.450	80/	1/	1:	0.150

BRANCH NUMBER = 15

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
1500	U/S CHAN	1000.	3.6228	1255.6228	11.9245	5.7710E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1501		983.	3.6272	1255.3184	11.9083	5.7709E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1502		965.	3.6328	1255.0153	11.8878	5.7708E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1503		948.	3.6403	1254.7139	11.8608	5.7707E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1504		930.	3.6499	1254.4147	11.8260	5.7705E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.150
1505		913.	3.6622	1254.1183	11.7820	5.7704E+02	1.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1506		896.	3.6781	1253.8253	11.7252	5.7702E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1507		878.	3.6986	1253.5370	11.6533	5.7699E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1508		861.	3.7245	1253.2542	11.5634	5.7697E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1509		843.	3.7574	1252.9783	11.4509	5.7694E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1510		826.	3.7987	1252.7107	11.3126	5.7691E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1511		809.	3.8500	1252.4532	11.1454	5.7687E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1512		791.	3.9131	1252.2075	10.9456	5.7683E+02	9.9999E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1513		774.	3.9901	1251.9757	10.7119	5.7679E+02	9.9999E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1514		756.	4.0831	1251.7599	10.4441	5.7674E+02	9.9999E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1515		739.	4.1923	1251.5603	10.1443	5.7669E+02	9.9999E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1516		722.	4.3187	1251.3779	9.8158	5.7663E+02	9.9998E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1517		704.	4.4623	1251.2126	9.4646	5.7657E+02	9.9998E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1518		687.	4.6224	1251.0641	9.0984	5.7651E+02	9.9999E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
1519		669.	4.7987	1250.9315	8.7234	5.7645E+02	9.9999E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 3.300
1520		652.	4.9901	1250.8141	8.3462	5.7638E+02	9.9977E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 3.250
1521		635.	5.1952	1250.7104	7.9726	5.7631E+02	9.9811E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 3.239
1522		617.	5.4130	1250.6194	7.6072	5.7623E+02	9.6999E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 3.125
1523		600.	5.6418	1250.5394	69.8085	5.7616E+02	9.2764E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 3.138
1524		582.	5.8805	1250.4694	6.9151	5.7608E+02	9.0022E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 3.138
1525	U/S RTRN	565.	6.1278	1250.4078	6.5922	5.7600E+02	8.5745E-01	80/ 1/ 1: 4.500	80/ 1/ 1: 4.450	80/ 1/ 1: 3.350

BRANCH NUMBER = 16

NODE	NODEID	STATION	MAX DEPTH	MAX ELEV	MAX VELOC	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
1600	D/SRETRN	565.	4.5708	1248.8508	10.9657	6.8738E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500
1601		550.	4.5709	1248.6681	10.9658	6.8740E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500
1602		534.	4.5709	1248.4852	10.9660	6.8741E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500
1603		519.	4.5709	1248.3024	10.9661	6.8743E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500
1604		504.	4.5709	1248.1195	10.9663	6.8744E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500
1605		489.	4.5709	1247.9366	10.9665	6.8746E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500
1606		473.	4.5709	1247.7538	10.9667	6.8747E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500
1607	OUTFALL	458.	4.5709	1247.5709	10.9669	6.8749E+02	1.1182E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.500	80/ 1/ 1: 0.500

FREE NODES

NODE	NODEID	MAX DEPTH	MAX ELEV	BOTM ELEV	QMAX	QMIN	TIME OF MAX Z	TIME OF MAX Q	TIME OF MIN Q
F1	BASIN2A	15.9105	1263.1605	1247.2500	1.1144E+03	-7.4164E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.165	80/ 1/ 1: 8.600
F2	BASIN2A	15.9105	1263.1605	1247.2500	8.0100E+02	-8.8913E-02	80/ 1/ 1: 4.450	80/ 1/ 1: 4.350	80/ 1/ 1: 0.050
F3	BASIN2B	10.6415	1258.6415	1248.0000	7.1582E+02	-4.0547E+01	80/ 1/ 1: 5.200	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
F4	BASIN2B	10.6415	1258.6415	1248.0000	4.5032E+01	-5.8120E+00	80/ 1/ 1: 5.200	80/ 1/ 1: 5.350	80/ 1/ 1: 4.019
F5	2ATO2B	1263.1604	1263.1604	0.0000	7.1573E+02	-4.0496E+01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.350	80/ 1/ 1: 6.850
F6	2ATO2B	1263.1604	1263.1604	0.0000	7.1573E+02	-4.0617E+01	80/ 1/ 1: 4.450	80/ 1/ 1: 4.350	80/ 1/ 1: 6.900
F7	BASEQB1	1262.3663	1262.3663	0.0000	1.0001E-01	9.9992E-02	80/ 1/ 1: 4.500	80/ 1/ 1: 5.800	80/ 1/ 1: 6.150
F8	BASEQB1	1262.3663	1262.3663	0.0000	1.0427E-01	2.2349E-02	80/ 1/ 1: 4.500	80/ 1/ 1: 5.000	80/ 1/ 1: 3.984
F9	2AOUTL	1263.1604	1263.1604	0.0000	8.5280E+01	-6.5310E-02	80/ 1/ 1: 4.450	80/ 1/ 1: 4.350	80/ 1/ 1: 0.050
F10	2AOUTL	1263.1604	1263.1604	0.0000	8.5277E+01	-6.5309E-02	80/ 1/ 1: 4.450	80/ 1/ 1: 4.350	80/ 1/ 1: 0.050
F11	BASEQB2	1263.1604	1263.1604	0.0000	5.4351E-01	-2.6976E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 8.600	80/ 1/ 1: 8.750
F12	BASEQB2	1263.1604	1263.1604	0.0000	6.7900E-01	-6.7214E-01	80/ 1/ 1: 4.450	80/ 1/ 1: 8.600	80/ 1/ 1: 8.100
F13	TOWNINF	1263.0828	1263.0828	0.0000	1.2189E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.050
F14	TOWNINF	1263.0828	1263.0828	0.0000	1.2188E+03	1.0000E+00	80/ 1/ 1: 4.500	80/ 1/ 1: 4.211	80/ 1/ 1: 0.050
F15	PALMAIN	1263.1605	1263.1605	0.0000	3.5000E+02	0.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 3.901	80/ 1/ 1: 0.050
F16	PALMAIN	1263.1605	1263.1605	0.0000	3.5000E+02	0.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.550	80/ 1/ 1: 0.050
F17	SIDEWEI	1263.1605	1263.1605	0.0000	7.6442E+02	0.0000E+00	80/ 1/ 1: 4.450	80/ 1/ 1: 4.165	80/ 1/ 1: 0.050
F18	SIDEWEI	1263.1605	1263.1605	0.0000	7.6441E+02	-6.6265E-03	80/ 1/ 1: 4.450	80/ 1/ 1: 4.165	80/ 1/ 1: 3.719
F19	TRNSITO	1261.8792	1261.8792	0.0000	5.7704E+02	1.0000E+00	80/ 1/ 1: 4.400	80/ 1/ 1: 4.450	80/ 1/ 1: 0.200
F20	TRNSTIO	1261.8792	1261.8792	0.0000	5.7704E+02	1.0000E+00	80/ 1/ 1: 4.400	80/ 1/ 1: 4.450	80/ 1/ 1: 3.250

LEVEL-POOL RESERVOIR NODES

NODE	NODEID	MAX DEPTH	MAX ELEV	STORAGE	SURF AREA
F2	BASIN2A	15.9105	1263.1605	2.189E+01	2.279E+00
F4	BASIN2B	10.6415	1258.6415	4.975E+01	6.140E+00

COMPUTATION TIME= 20.16 SECS OR 0.3360 MINS
TIME IN COMPUTING NETWORK MATRIX= 3.42 SECS.
TIME IN SOLVING NETWORK MATRIX= 2.19 SECS.

EXHIBIT A-7

HYDROGRAPHS AND STAGES GRAPHS AT SELECTED LOCATIONS

22 11 44239.00000000 44240.00000000

	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.27	1247.27	1248.10	1248.56	1248.10	1247.42	1247.60	1245.06
0.000000	1.0	1.0	1.1	0.0	-0.9	0.1	-0.3	0.1	0.5	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.28	1247.28	1248.10	1248.59	1248.10	1247.35	1247.60	1245.05
0.000000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.28	1247.28	1248.10	1248.60	1248.10	1247.33	1247.60	1245.05
0.000000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.29	1247.29	1248.10	1248.60	1248.10	1247.33	1247.60	1245.04
0.000000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.30	1247.30	1248.10	1248.60	1248.10	1247.33	1247.60	1245.04
0.000000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.30	1247.30	1248.10	1248.60	1248.10	1247.33	1247.60	1245.03
0.050000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.31	1247.31	1248.10	1248.60	1248.10	1247.33	1247.60	1245.03
0.100000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.31	1247.31	1248.10	1248.60	1248.10	1247.33	1247.60	1245.02
0.150000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.32	1247.32	1248.10	1248.60	1248.10	1247.33	1247.60	1245.02
0.200000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.32	1247.32	1248.10	1248.60	1248.10	1247.33	1247.60	1245.02
0.250000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.33	1247.33	1248.10	1248.60	1248.10	1247.33	1247.60	1245.02
0.300000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.33	1247.33	1248.10	1248.60	1248.10	1247.33	1247.60	1245.02
0.350000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.34	1247.34	1248.10	1248.60	1248.10	1247.34	1247.60	1245.02
0.400000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.34	1247.34	1248.10	1248.60	1248.10	1247.34	1247.60	1245.02
0.450000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.34	1247.34	1248.10	1248.60	1248.10	1247.34	1247.60	1245.02
0.500000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.35	1247.35	1248.10	1248.60	1248.10	1247.35	1247.60	1245.02
0.550000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.35	1247.35	1248.10	1248.60	1248.10	1247.35	1247.60	1245.02
0.600000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.35	1247.35	1248.10	1248.60	1248.10	1247.35	1247.60	1245.02
0.650000	1.0	1.0	1.0	0.0	-0.1	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.35	1247.35	1248.10	1248.60	1248.10	1247.35	1247.60	1245.02
0.700000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.35	1247.35	1248.10	1248.60	1248.10	1247.35	1247.60	1245.03
0.750000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.36	1247.36	1248.10	1248.60	1248.10	1247.36	1247.60	1245.03
0.800000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.36	1247.36	1248.10	1248.60	1248.10	1247.36	1247.60	1245.03
0.850000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.36	1247.36	1248.10	1248.60	1248.10	1247.36	1247.60	1245.03
0.900000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.36	1247.36	1248.10	1248.60	1248.10	1247.36	1247.60	1245.03
0.950000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.36	1247.36	1248.10	1248.60	1248.10	1247.36	1247.60	1245.03
1.000000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.36	1247.36	1248.10	1248.60	1248.10	1247.36	1247.60	1245.03
1.050000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.36	1247.36	1248.10	1248.60	1248.10	1247.36	1247.60	1245.03
1.100000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.150000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.200000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.250000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.300000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.350000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.400000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.450000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.500000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.550000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.600000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04

1.650000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.700000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.750000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.800000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.850000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.37	1247.37	1248.10	1248.60	1248.10	1247.37	1247.60	1245.04
1.900000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.04
1.950000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.04
2.000000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.04
2.050000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.04
2.100000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.05
2.150000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.05
2.200000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.05
2.250000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.38	1247.38	1248.10	1248.60	1248.10	1247.38	1247.60	1245.05
2.300000	1.0	1.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.43	1247.43	1248.10	1248.60	1248.10	1247.43	1247.60	1245.05
2.350000	1.0	1.0	1.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.59	1247.59	1248.10	1248.60	1248.10	1247.59	1247.60	1245.07
2.400000	1.0	1.0	1.0	0.0	0.8	0.1	0.1	0.1	0.9	0.1	0.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.73	1247.73	1248.10	1248.60	1248.10	1247.73	1247.60	1245.16
2.450000	1.0	1.0	1.0	0.0	1.6	0.1	0.1	0.1	1.7	0.1	0.6
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.83	1247.83	1248.10	1248.60	1248.10	1247.83	1247.60	1245.31
2.500000	1.0	1.0	1.0	0.0	2.4	0.1	0.1	0.1	2.5	0.1	1.4
1980/ 1/ 1	1256.85	1256.85	1256.68	1247.92	1247.92	1248.10	1248.60	1248.10	1247.92	1247.60	1245.45
2.550000	1.0	1.0	1.0	0.0	3.2	0.1	0.1	0.1	3.3	0.1	2.5
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.00	1248.00	1248.10	1248.60	1248.10	1248.00	1247.60	1245.55
2.600000	1.0	1.0	1.0	0.0	3.9	0.1	0.1	0.1	4.0	0.1	3.3
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.06	1248.06	1248.10	1248.60	1248.10	1248.06	1247.60	1245.63
2.650000	1.0	1.0	1.0	0.0	4.7	0.1	0.1	0.1	4.8	0.1	4.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.13	1248.13	1248.10	1248.60	1248.10	1248.13	1247.60	1245.70
2.700000	1.0	1.0	1.0	0.0	5.5	0.1	0.1	0.1	5.6	0.1	5.0
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.19	1248.19	1248.10	1248.60	1248.10	1248.19	1247.60	1245.76
2.750000	1.0	1.0	1.0	0.0	6.3	0.1	0.1	0.1	6.4	0.1	5.8
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.26	1248.26	1248.10	1248.60	1248.10	1248.26	1247.60	1245.82
2.800000	1.0	1.0	1.0	0.0	7.1	0.1	0.1	0.1	7.2	0.1	6.6
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.32	1248.32	1248.10	1248.60	1248.10	1248.32	1247.60	1245.88
2.850000	1.0	1.0	1.0	0.0	7.9	0.1	0.1	0.1	8.0	0.1	7.4
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.38	1248.38	1248.10	1248.60	1248.10	1248.38	1247.60	1245.93
2.900000	1.0	1.0	1.0	0.0	8.8	0.1	0.1	0.1	8.9	0.1	8.3
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.44	1248.44	1248.10	1248.60	1248.10	1248.44	1247.60	1245.99
2.950000	1.0	1.0	1.0	0.0	9.7	0.1	0.1	0.1	9.8	0.1	9.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.50	1248.50	1248.10	1248.60	1248.10	1248.50	1247.60	1246.04
3.000000	1.0	1.0	1.0	0.0	10.6	0.1	0.1	0.1	10.7	0.1	10.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.56	1248.56	1248.10	1248.60	1248.10	1248.56	1247.60	1246.09
3.050000	1.0	1.0	1.0	0.0	11.6	0.1	0.1	0.1	11.7	0.1	11.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.59	1248.59	1248.10	1248.59	1248.10	1248.59	1247.60	1246.12
3.075000	1.0	1.0	1.0	0.0	12.0	0.1	0.1	0.1	12.3	0.1	11.6
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.63	1248.63	1248.10	1248.60	1248.10	1248.63	1247.60	1246.15
3.100000	1.0	1.0	1.0	0.0	12.8	0.1	0.1	0.1	12.9	0.1	12.2
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.67	1248.67	1248.10	1248.60	1248.10	1248.67	1247.60	1246.18
3.125000	1.0	1.0	1.0	0.0	13.4	0.1	0.1	0.1	13.5	0.1	12.8
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.68	1248.68	1248.10	1248.60	1248.10	1248.68	1247.60	1246.19
3.137500	1.0	1.0	1.0	0.0	13.6	0.1	0.1	0.1	13.8	0.1	13.1
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.70	1248.70	1248.10	1248.60	1248.10	1248.70	1247.60	1246.21
3.150000	1.0	1.0	1.0	0.0	14.1	0.1	0.1	0.1	14.2	0.1	13.4
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.74	1248.74	1248.10	1248.60	1248.10	1248.74	1247.60	1246.23
3.168750	1.0	1.0	1.0	0.0	14.6	0.1	0.1	0.1	14.7	0.1	13.9
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.79	1248.79	1248.10	1248.60	1248.10	1248.79	1247.60	1246.27
3.196875	1.0	1.0	1.0	0.0	15.5	0.1	0.1	0.1	15.6	0.1	14.7
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.87	1248.87	1248.10	1248.60	1248.10	1248.87	1247.60	1246.33
3.239063	1.0	1.0	1.0	0.0	16.9	0.1	0.1	0.1	17.0	0.1	16.1
1980/ 1/ 1	1256.85	1256.85	1256.68	1248.89	1248.89	1248.10	1248.60	1248.10	1248.89	1247.60	1246.35
3.250000	1.0	1.0	1.0	0.0	17.3	0.1	0.1	0.1	17.4	0.1	16.4
1980/ 1/ 1	1256.85	1256.85	1256.68	1249.00	1249.00	1248.10	1248.60	1248.10	1249.00	1247.60	1246.43

3.300000	1.0	1.0	1.0	0.0	19.3	0.1	0.1	0.1	19.4	0.1	18.3
1980/ 1/ 1	1256.86	1256.86	1256.69	1249.12	1249.12	1248.10	1248.60	1248.10	1249.12	1247.60	1246.52
3.350000	1.5	1.5	1.3	0.0	21.6	0.1	0.1	0.1	21.7	0.1	20.5
1980/ 1/ 1	1257.27	1257.27	1257.21	1249.27	1249.27	1248.10	1248.60	1248.10	1249.27	1247.60	1246.61
3.400000	26.2	26.2	18.4	0.0	24.5	0.1	0.1	0.1	24.6	0.1	23.1
1980/ 1/ 1	1257.66	1257.66	1257.64	1249.35	1249.35	1248.10	1248.60	1248.10	1249.35	1247.60	1246.67
3.425000	47.8	47.8	37.0	0.0	26.0	0.1	0.1	0.1	26.1	0.1	24.6
1980/ 1/ 1	1257.85	1257.85	1257.85	1249.40	1249.40	1248.10	1248.60	1248.10	1249.40	1247.60	1246.70
3.437500	59.4	59.4	49.2	0.0	26.8	0.1	0.1	0.1	26.9	0.1	25.4
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1257.95	1257.95	1257.96	1249.42	1249.42	1248.10	1248.60	1248.10	1249.42	1247.60	1246.71
3.443750	65.8	65.8	55.4	0.0	27.3	0.1	0.1	0.1	27.3	0.1	25.7
1980/ 1/ 1	1258.05	1258.05	1258.05	1249.44	1249.44	1248.10	1248.60	1248.10	1249.44	1247.60	1246.73
3.450000	70.9	70.9	61.1	0.0	27.7	0.1	0.1	0.1	27.8	0.1	26.2
1980/ 1/ 1	1258.09	1258.09	1258.10	1249.46	1249.46	1248.10	1248.60	1248.10	1249.46	1247.60	1246.73
3.453125	72.8	72.8	63.7	0.0	27.9	0.1	0.1	0.1	28.0	0.1	26.4
1980/ 1/ 1	1258.13	1258.13	1258.14	1249.47	1249.47	1248.10	1248.60	1248.10	1249.47	1247.60	1246.74
3.456250	74.2	74.2	66.1	0.0	28.1	0.1	0.1	0.1	28.2	0.1	26.6
1980/ 1/ 1	1258.17	1258.17	1258.18	1249.48	1249.48	1248.10	1248.60	1248.10	1249.48	1247.60	1246.75
3.459375	75.6	75.6	68.2	0.0	28.3	0.1	0.1	0.1	28.4	0.1	26.8
1980/ 1/ 1	1258.23	1258.23	1258.23	1249.50	1249.50	1248.10	1248.60	1248.10	1249.50	1247.60	1246.76
3.464062	78.1	78.1	71.2	0.0	28.6	0.1	0.1	0.1	28.7	0.1	27.1
1980/ 1/ 1	1258.30	1258.30	1258.30	1249.52	1249.52	1248.10	1248.60	1248.10	1249.52	1247.60	1246.78
3.471094	81.8	81.8	75.4	0.0	29.1	0.1	0.1	0.1	29.2	0.1	27.6
1980/ 1/ 1	1258.39	1258.39	1258.39	1249.57	1249.57	1248.10	1248.60	1248.10	1249.57	1247.60	1246.81
3.481641	86.8	86.8	81.7	0.0	29.8	0.1	0.1	0.1	29.9	0.1	28.3
1980/ 1/ 1	1258.50	1258.50	1258.50	1249.63	1249.63	1248.10	1248.60	1248.10	1249.63	1247.60	1246.85
3.497461	93.7	93.7	89.5	0.0	30.9	0.1	0.1	0.1	31.0	0.1	29.4
1980/ 1/ 1	1258.64	1258.64	1258.63	1249.74	1249.74	1248.10	1248.60	1248.10	1249.74	1247.60	1246.92
3.521191	103.0	103.0	99.4	0.0	32.5	0.1	0.1	0.1	32.6	0.1	31.0
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1258.83	1258.83	1258.83	1249.92	1249.92	1248.10	1248.60	1248.10	1249.92	1247.60	1247.01
3.556787	117.0	117.0	113.4	0.0	34.8	0.1	0.1	0.1	34.9	0.1	33.4
1980/ 1/ 1	1259.10	1259.10	1259.10	1250.19	1250.19	1248.10	1248.60	1248.10	1250.19	1247.60	1247.11
3.600000	138.0	138.0	133.5	0.0	37.3	0.1	0.1	0.1	37.4	0.1	36.0
1980/ 1/ 1	1259.27	1259.27	1259.27	1250.35	1250.35	1248.10	1248.60	1248.10	1250.35	1247.60	1247.16
3.621606	153.2	153.2	147.6	0.0	38.5	0.1	0.1	0.1	38.6	0.1	37.3
1980/ 1/ 1	1259.36	1259.36	1259.36	1250.44	1250.44	1248.10	1248.60	1248.10	1250.44	1247.60	1247.19
3.632410	161.2	161.2	155.4	0.0	39.0	0.1	0.1	0.1	39.1	0.1	38.0
1980/ 1/ 1	1259.46	1259.46	1259.45	1250.53	1250.53	1248.10	1248.60	1248.10	1250.53	1247.60	1247.22
3.643213	169.4	169.4	163.4	0.0	39.7	0.1	0.1	0.1	39.7	0.1	38.7
1980/ 1/ 1	1259.55	1259.55	1259.55	1250.63	1250.63	1248.10	1248.60	1248.10	1250.63	1247.60	1247.26
3.654016	178.1	178.1	171.7	0.0	40.3	0.1	0.1	0.1	40.4	0.1	39.5
1980/ 1/ 1	1259.66	1259.66	1259.66	1250.73	1250.73	1248.10	1248.60	1248.10	1250.73	1247.60	1247.29
3.664819	187.9	187.9	180.8	0.0	41.0	0.1	0.1	0.1	41.1	0.1	40.2
1980/ 1/ 1	1259.77	1259.77	1259.77	1250.84	1250.84	1248.10	1248.60	1248.10	1250.84	1247.60	1247.33
3.675622	198.1	198.1	190.6	0.0	41.7	0.1	0.1	0.1	41.8	0.1	41.0
1980/ 1/ 1	1259.89	1259.89	1259.89	1250.95	1250.95	1248.10	1248.60	1248.10	1250.95	1247.60	1247.37
3.686426	208.4	208.4	200.7	0.0	42.4	0.1	0.1	0.1	42.5	0.1	41.8
1980/ 1/ 1	1260.01	1260.01	1260.01	1251.07	1251.07	1248.10	1248.60	1248.10	1251.07	1247.60	1247.41
3.697229	219.1	219.1	211.4	0.0	43.2	0.1	0.1	0.1	43.3	0.1	42.6
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1260.13	1260.13	1260.13	1251.20	1251.20	1248.10	1248.60	1248.10	1251.20	1247.60	1247.45
3.708032	230.9	230.9	222.7	0.0	44.0	0.1	0.1	0.1	44.1	0.1	43.5
1980/ 1/ 1	1260.26	1260.26	1260.26	1251.32	1251.32	1248.10	1248.60	1248.10	1251.32	1247.60	1247.50
3.718835	243.3	243.3	234.6	0.0	44.8	0.1	0.1	0.1	44.9	0.1	44.3
1980/ 1/ 1	1260.40	1260.41	1260.41	1251.54	1251.54	1248.10	1248.60	1248.10	1251.54	1247.60	1247.57
3.735040	267.5	254.5	248.8	12.9	46.1	0.1	0.1	0.1	46.1	0.1	45.6
1980/ 1/ 1	1260.47	1260.49	1260.49	1251.79	1251.79	1248.10	1248.60	1248.10	1251.79	1247.65	1247.65
3.751245	292.0	260.2	257.2	31.9	47.6	0.1	0.1	0.1	47.6	0.1	47.0
1980/ 1/ 1	1260.53	1260.56	1260.56	1252.07	1252.07	1248.10	1248.60	1248.10	1252.07	1247.73	1247.73
3.767450	318.0	267.3	264.1	50.7	49.2	0.1	0.1	0.1	49.2	0.1	48.7
1980/ 1/ 1	1260.59	1260.63	1260.63	1252.39	1252.39	1248.10	1248.60	1248.10	1252.39	1247.80	1247.80
3.783655	344.7	274.1	271.0	70.6	50.9	0.1	0.1	0.1	51.0	0.1	50.5
1980/ 1/ 1	1260.64	1260.70	1260.69	1252.73	1252.73	1248.10	1248.60	1248.10	1252.73	1247.87	1247.87
3.799860	371.3	280.0	277.2	91.3	52.8	0.1	0.1	0.1	52.9	0.1	52.4
1980/ 1/ 1	1260.71	1260.79	1260.79	1253.12	1253.12	1248.10	1248.60	1248.10	1253.12	1247.94	1247.94
3.816064	414.2	291.6	286.7	122.6	54.8	0.1	0.1	0.1	54.9	0.1	54.5
1980/ 1/ 1	1260.75	1260.84	1260.84	1253.33	1253.33	1248.10	1248.60	1248.10	1253.33	1247.98	1247.98
3.824167	438.0	297.2	292.5	140.8	55.9	0.1	0.1	0.1	55.9	0.1	55.6
1980/ 1/ 1	1260.76	1260.86	1260.86	1253.44	1253.44	1248.10	1248.60	1248.10	1253.44	1248.00	1248.00
3.828218	449.5	299.6	295.1	149.9	56.4	0.1	0.1	0.1	56.5	0.1	56.1
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1260.77	1260.88	1260.88	1253.49	1253.49	1248.10	1248.59	1248.10	1253.49	1248.01	1248.01
3.830244	456.0	301.6	296.6	154.4	56.5	0.1	0.0	0.1	56.8	0.1	56.4
1980/ 1/ 1	1260.78	1260.89	1260.89	1253.55	1253.55	1248.10	1248.59	1248.10	1253.55	1248.02	1248.02
3.832269	461.6	302.6	298.0	159.0	56.7	0.1	0.1	0.1	57.0	0.1	56.7
1980/ 1/ 1	1260.79	1260.91	1260.91	1253.63	1253.63	1248.10	1248.60	1248.10	1253.63	1248.03	1248.03
3.835308	469.3	303.4	299.7	165.9	57.4	0.1	0.1	0.1	57.5	0.1	57.1
1980/ 1/ 1	1260.81	1260.93	1260.93	1253.76	1253.76	1248.10	1248.60	1248.10	1253.76	1248.06	1248.06

3.839865	482.4	306.7	302.4	175.7	58.1	0.1	0.1	0.1	58.1	0.1	57.7
1980/ 1/ 1	1260.84	1260.97	1260.97	1253.97	1253.97	1248.10	1248.60	1248.10	1253.97	1248.10	1248.10
3.846702	502.2	311.3	306.8	190.9	59.0	0.1	0.1	0.1	59.1	0.1	58.7
1980/ 1/ 1	1260.88	1261.03	1261.03	1254.28	1254.28	1248.10	1248.60	1248.10	1254.28	1248.15	1248.15
3.856956	534.1	317.8	313.4	216.3	60.5	-0.3	0.1	0.1	60.6	-0.3	59.8
1980/ 1/ 1	1260.92	1261.10	1261.10	1254.61	1254.61	1248.10	1248.60	1248.10	1254.61	1248.21	1248.21
3.867211	567.7	324.3	319.4	243.3	62.1	-0.4	0.1	0.1	62.1	-0.4	61.3
1980/ 1/ 1	1260.96	1261.16	1261.16	1254.95	1254.95	1248.10	1248.60	1248.10	1254.95	1248.27	1248.28
3.877465	601.4	330.4	325.7	271.1	63.6	-0.6	0.1	0.1	63.7	-0.6	62.7
1980/ 1/ 1	1260.98	1261.19	1261.19	1255.13	1255.13	1248.10	1248.60	1248.10	1255.13	1248.30	1248.31
3.882593	618.3	333.8	329.2	284.5	64.4	-0.8	0.1	0.1	64.5	-0.8	63.3
1980/ 1/ 1	1261.00	1261.23	1261.22	1255.30	1255.30	1248.10	1248.60	1248.10	1255.30	1248.33	1248.34
3.887720	635.4	337.5	332.8	297.9	65.2	-0.9	0.1	0.1	65.3	-0.9	64.0
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1261.01	1261.26	1261.26	1255.48	1255.48	1248.10	1248.61	1248.10	1255.48	1248.36	1248.38
3.892848	654.4	343.6	337.3	310.8	65.8	-1.1	0.1	0.1	66.1	-1.1	64.6
1980/ 1/ 1	1261.04	1261.30	1261.30	1255.76	1255.76	1248.10	1248.60	1248.10	1255.76	1248.41	1248.43
3.900538	676.2	344.5	341.8	331.7	67.2	-1.4	0.1	0.1	67.3	-1.4	65.5
1980/ 1/ 1	1261.08	1261.37	1261.37	1256.17	1256.17	1248.10	1249.33	1248.10	1256.17	1248.48	1248.51
3.912075	713.5	353.8	348.9	359.7	87.5	-1.9	18.6	0.1	69.0	-1.9	66.8
1980/ 1/ 1	1261.10	1261.40	1261.40	1256.37	1256.37	1248.10	1249.74	1248.12	1256.37	1248.51	1248.54
3.917843	731.5	357.2	352.8	374.3	110.0	-2.1	40.3	0.4	69.8	-2.1	67.2
1980/ 1/ 1	1261.11	1261.42	1261.42	1256.47	1256.47	1248.10	1249.91	1248.18	1256.47	1248.53	1248.56
3.920727	740.3	358.8	354.6	381.5	121.0	-2.3	51.0	0.9	70.2	-2.3	67.5
1980/ 1/ 1	1261.11	1261.42	1261.42	1256.52	1256.52	1248.10	1250.01	1248.24	1256.52	1248.53	1248.57
3.922169	744.6	359.6	355.5	385.0	127.9	-2.3	57.7	1.5	70.3	-2.3	67.6
1980/ 1/ 1	1261.11	1261.43	1261.43	1256.54	1256.54	1248.10	1250.06	1248.27	1256.54	1248.54	1248.58
3.922890	746.9	360.1	355.9	386.7	132.8	-2.4	62.4	2.0	70.4	-2.4	67.6
1980/ 1/ 1	1261.12	1261.43	1261.43	1256.56	1256.56	1248.10	1250.12	1248.32	1256.56	1248.54	1248.58
3.923611	749.1	360.6	356.4	388.5	137.6	-2.4	67.2	2.8	70.5	-2.4	67.7
1980/ 1/ 1	1261.12	1261.44	1261.44	1256.59	1256.59	1248.10	1250.17	1248.37	1256.59	1248.54	1248.58
3.924332	751.3	361.1	356.8	390.2	142.4	-2.4	71.9	3.8	70.6	-2.4	67.8
1980/ 1/ 1	1261.12	1261.44	1261.44	1256.62	1256.62	1248.10	1250.26	1248.46	1256.62	1248.55	1248.59
3.925414	754.6	361.7	357.4	392.9	149.5	-2.5	78.9	5.9	70.7	-2.5	67.8
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1261.13	1261.45	1261.45	1256.67	1256.67	1248.10	1250.38	1248.61	1256.67	1248.56	1248.60
3.927036	759.6	362.7	358.4	396.9	160.1	-2.5	89.3	10.3	70.9	-2.5	68.0
1980/ 1/ 1	1261.13	1261.47	1261.47	1256.75	1256.75	1248.11	1250.57	1248.85	1256.75	1248.57	1248.62
3.929470	767.0	364.1	359.8	402.9	175.6	-2.7	104.6	20.0	71.2	-2.7	68.1
1980/ 1/ 1	1261.14	1261.49	1261.49	1256.86	1256.86	1248.11	1250.83	1249.21	1256.86	1248.59	1248.64
3.933120	778.9	365.9	361.8	412.9	198.3	-2.8	126.9	40.0	71.6	-2.8	68.4
1980/ 1/ 1	1261.16	1261.51	1261.51	1257.02	1257.02	1248.12	1251.21	1249.69	1257.02	1248.61	1248.67
3.938595	796.0	368.5	364.7	427.5	233.0	-3.1	161.0	76.8	72.1	-3.1	68.7
1980/ 1/ 1	1261.17	1261.56	1261.55	1257.25	1257.25	1248.14	1251.83	1250.29	1257.25	1248.65	1248.71
3.946808	821.5	373.0	369.0	448.5	296.5	-3.4	223.7	139.4	72.9	-3.4	69.2
1980/ 1/ 1	1261.20	1261.62	1261.62	1257.54	1257.54	1248.21	1252.75	1251.05	1257.54	1248.69	1248.77
3.959128	858.2	379.5	375.8	478.6	380.9	-3.9	307.1	240.1	73.9	-3.9	69.8
1980/ 1/ 1	1261.22	1261.68	1261.68	1257.80	1257.80	1248.30	1253.95	1251.63	1257.80	1248.73	1248.82
3.971447	894.1	386.3	382.5	507.9	455.1	-4.3	380.4	335.9	74.8	-4.3	70.2
1980/ 1/ 1	1261.25	1261.74	1261.74	1258.03	1258.03	1248.43	1255.67	1252.15	1258.03	1248.77	1248.87
3.983767	930.2	393.1	389.3	537.0	523.6	-4.7	448.2	438.9	75.5	-4.7	70.6
1980/ 1/ 1	1261.26	1261.77	1261.77	1258.14	1258.14	1248.50	1256.14	1252.29	1258.14	1248.79	1248.90
3.989926	948.0	396.3	392.6	551.7	548.2	-5.0	472.5	469.4	75.9	-5.0	70.8
1980/ 1/ 1	1261.25	1261.81	1261.81	1258.25	1258.25	1248.57	1256.38	1252.34	1258.25	1248.80	1248.92
3.996086	968.7	404.0	397.5	564.7	558.1	-5.1	482.1	481.5	76.2	-5.1	70.9
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1261.29	1261.84	1261.84	1258.41	1258.41	1248.69	1256.67	1252.40	1258.41	1248.83	1248.95
4.005325	988.4	401.2	400.8	587.1	573.1	-5.4	496.5	495.7	76.7	-5.4	71.1
1980/ 1/ 1	1261.31	1261.89	1261.89	1258.65	1258.65	1248.86	1257.09	1252.47	1258.65	1248.86	1249.01
4.019185	1021.9	410.6	406.5	611.2	592.8	-5.8	515.5	515.1	77.5	-5.8	71.5
1980/ 1/ 1	1261.34	1261.97	1261.98	1259.02	1259.02	1249.14	1257.65	1252.57	1259.02	1249.14	1249.18
4.039974	1069.4	419.0	416.3	650.4	619.2	-2.8	541.1	540.8	78.3	-2.8	75.0
1980/ 1/ 1	1261.37	1262.07	1262.07	1259.57	1259.57	1249.58	1258.46	1252.70	1259.57	1249.55	1249.54
4.071157	1125.8	430.7	428.3	695.2	655.0	3.1	576.1	576.0	79.0	3.1	82.2
1980/ 1/ 1	1261.41	1262.18	1262.18	1260.37	1260.37	1250.21	1259.45	1252.82	1260.37	1250.04	1249.92
4.117933	1184.4	442.5	441.0	741.9	698.5	8.5	618.0	617.9	80.7	8.5	89.1
1980/ 1/ 1	1261.43	1262.23	1262.23	1261.12	1261.12	1250.80	1260.27	1252.91	1261.12	1250.46	1250.20
4.164708	1212.0	447.6	447.0	764.4	733.2	12.0	650.9	650.8	82.4	12.0	94.4
1980/ 1/ 1	1261.52	1262.28	1262.28	1261.79	1261.79	1251.40	1260.93	1252.98	1261.79	1250.87	1250.46
4.211483	1215.9	454.7	453.6	761.2	760.5	15.1	676.7	676.6	84.0	15.1	99.0
1980/ 1/ 1	1262.08	1262.62	1262.62	1262.31	1262.31	1252.02	1261.43	1253.02	1262.31	1251.29	1250.73
4.258259	1191.8	500.1	491.9	691.7	780.9	17.7	696.1	696.0	84.9	17.7	102.6
1980/ 1/ 1	1262.52	1262.94	1262.94	1262.70	1262.70	1252.59	1261.80	1253.05	1262.70	1251.70	1251.00
4.305035	1173.9	531.2	526.8	642.7	795.1	19.6	709.9	709.9	85.3	19.6	104.9
1980/ 1/ 1	1262.81	1263.14	1263.14	1262.95	1262.95	1253.15	1262.04	1253.15	1262.95	1252.07	1251.23
4.350000	1128.3	551.5	548.2	576.9	801.0	21.5	715.8	715.8	85.4	21.5	106.9
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1262.99	1263.25	1263.25	1263.10	1263.10	1253.75	1262.23	1253.75	1263.10	1252.46	1251.45
4.400000	1067.5	568.9	567.6	498.6	783.9	23.6	699.0	698.9	85.1	23.6	108.8
1980/ 1/ 1	1263.07	1263.29	1263.28	1263.16	1263.16	1254.31	1262.33	1254.31	1263.16	1252.79	1251.60

4.450000	1009.6	577.3	577.0	432.3	764.6	25.7	679.9	679.9	84.8	25.7	110.5
1980/ 1/ 1	1263.08	1263.26	1263.26	1263.15	1263.15	1254.82	1262.37	1254.82	1263.15	1253.06	1251.69
4.500000	952.4	574.1	574.9	378.3	743.6	27.6	659.3	659.3	84.5	27.6	112.1
1980/ 1/ 1	1263.03	1263.19	1263.19	1263.10	1263.10	1255.32	1262.35	1255.32	1263.10	1253.30	1251.73
4.550000	892.6	561.1	562.5	331.5	720.7	29.5	636.8	636.8	84.1	29.5	113.6
1980/ 1/ 1	1262.93	1263.06	1263.06	1262.98	1262.98	1255.79	1262.29	1255.79	1262.98	1253.52	1251.73
4.600000	829.3	537.1	539.6	292.2	695.4	31.4	611.9	611.9	83.7	31.4	115.1
1980/ 1/ 1	1262.72	1262.84	1262.83	1262.77	1262.77	1256.22	1262.12	1256.22	1262.77	1253.69	1251.70
4.650000	768.2	510.8	515.1	257.4	666.1	33.2	583.3	583.3	83.0	33.2	116.1
1980/ 1/ 1	1262.43	1262.54	1262.54	1262.47	1262.47	1256.60	1261.88	1256.60	1262.47	1253.82	1251.63
4.700000	712.9	477.9	483.0	234.9	633.4	34.8	551.5	551.5	82.1	34.8	116.9
1980/ 1/ 1	1262.09	1262.20	1262.20	1262.14	1262.14	1256.96	1261.60	1256.96	1262.14	1253.92	1251.52
4.750000	658.6	438.3	443.9	220.3	598.0	36.4	516.9	516.9	81.2	36.4	117.7
1980/ 1/ 1	1261.73	1261.84	1261.84	1261.77	1261.77	1257.30	1261.30	1257.30	1261.77	1253.98	1251.37
4.800000	601.9	395.1	400.9	206.8	560.2	38.0	480.0	480.0	80.4	38.0	118.5
1980/ 1/ 1	1261.35	1261.46	1261.46	1261.39	1261.39	1257.60	1260.97	1257.60	1261.39	1254.02	1251.20
4.850000	539.2	352.7	358.8	186.5	520.0	39.5	440.6	440.6	79.6	39.5	119.1
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1260.96	1261.07	1261.06	1260.99	1260.99	1257.87	1260.63	1257.87	1260.99	1254.04	1251.02
4.900000	476.1	310.4	316.3	165.7	477.2	40.9	398.6	398.6	78.8	40.9	119.6
1980/ 1/ 1	1260.72	1260.80	1260.80	1260.58	1260.58	1258.11	1260.26	1258.11	1260.58	1254.06	1250.86
4.950000	414.0	285.2	288.1	128.9	430.1	42.0	352.5	352.5	77.7	42.0	119.8
1980/ 1/ 1	1260.63	1260.68	1260.68	1260.13	1260.13	1258.30	1259.88	1258.30	1260.13	1254.07	1250.75
5.000000	361.3	274.4	275.7	86.9	378.1	42.9	301.9	301.9	76.4	42.9	119.3
1980/ 1/ 1	1260.55	1260.58	1260.58	1259.70	1259.70	1258.45	1259.50	1258.45	1259.70	1254.09	1250.65
5.050000	321.0	264.4	266.0	56.6	320.5	43.6	245.8	245.8	75.0	43.6	118.6
1980/ 1/ 1	1260.47	1260.48	1260.48	1259.29	1259.29	1258.56	1259.16	1258.56	1259.29	1254.09	1250.57
5.100000	284.8	254.8	256.2	30.0	259.2	44.2	185.8	185.8	73.7	44.2	117.8
1980/ 1/ 1	1260.38	1260.38	1260.38	1258.95	1258.95	1258.62	1258.86	1258.62	1258.95	1254.07	1250.48
5.150000	254.1	244.8	246.3	9.4	190.0	44.6	117.6	117.6	72.6	44.6	117.2
1980/ 1/ 1	1260.23	1260.23	1260.23	1258.72	1258.72	1258.64	1258.68	1258.64	1258.72	1254.03	1250.41
5.200000	229.7	229.7	232.2	0.0	120.5	44.8	48.8	48.8	71.9	44.8	116.7
1980/ 1/ 1	1260.03	1260.03	1260.03	1258.61	1258.61	1258.62	1258.62	1258.62	1258.61	1253.98	1250.33
5.250000	209.9	209.9	213.1	0.0	63.6	45.0	-8.0	-8.0	71.8	45.0	116.7
1980/ 1/ 1	1259.83	1259.83	1259.82	1258.55	1258.55	1258.58	1258.57	1258.57	1258.55	1253.93	1250.27
5.300000	192.2	192.2	195.0	0.0	52.2	45.0	-19.4	-19.4	71.8	45.0	116.8
1980/ 1/ 1	1259.67	1259.67	1259.66	1258.49	1258.49	1258.53	1258.51	1258.52	1258.49	1253.88	1250.21
5.350000	179.1	179.1	181.1	0.0	47.9	45.0	-23.7	-23.7	71.8	45.0	116.8
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1259.54	1259.54	1259.54	1258.44	1258.44	1258.48	1258.46	1258.47	1258.44	1253.83	1250.17
5.400000	168.6	168.6	170.2	0.0	45.7	45.0	-25.8	-25.8	71.7	45.0	116.8
1980/ 1/ 1	1259.43	1259.43	1259.42	1258.39	1258.39	1258.44	1258.41	1258.42	1258.39	1253.79	1250.13
5.450000	159.3	159.3	160.8	0.0	44.3	45.0	-27.2	-27.2	71.7	45.0	116.7
1980/ 1/ 1	1259.34	1259.34	1259.34	1258.34	1258.34	1258.39	1258.36	1258.37	1258.34	1253.74	1250.10
5.500000	152.6	152.6	153.6	0.0	43.5	44.9	-27.9	-27.9	71.6	44.9	116.5
1980/ 1/ 1	1259.28	1259.28	1259.28	1258.28	1258.28	1258.33	1258.31	1258.32	1258.28	1253.71	1250.07
5.550000	147.3	147.3	148.1	0.0	43.1	44.9	-28.6	-28.6	71.5	44.9	116.4
1980/ 1/ 1	1259.23	1259.23	1259.22	1258.23	1258.23	1258.28	1258.26	1258.27	1258.23	1253.67	1250.05
5.600000	143.0	143.0	143.7	0.0	42.1	44.8	-29.3	-29.3	71.3	44.8	116.1
1980/ 1/ 1	1259.19	1259.19	1259.19	1258.18	1258.18	1258.23	1258.20	1258.22	1258.18	1253.64	1250.03
5.650000	140.5	140.5	140.9	0.0	41.4	44.7	-29.7	-29.7	71.2	44.7	115.9
1980/ 1/ 1	1259.17	1259.17	1259.16	1258.13	1258.13	1258.18	1258.15	1258.17	1258.13	1253.60	1250.01
5.700000	138.5	138.5	138.8	0.0	41.1	44.6	-29.9	-29.9	71.1	44.6	115.7
1980/ 1/ 1	1259.14	1259.14	1259.14	1258.07	1258.07	1258.13	1258.10	1258.12	1258.07	1253.57	1249.99
5.750000	136.5	136.5	136.8	0.0	40.5	44.5	-30.2	-30.2	70.9	44.5	115.4
1980/ 1/ 1	1259.13	1259.13	1259.12	1258.02	1258.02	1258.08	1258.05	1258.06	1258.02	1253.54	1249.97
5.800000	135.3	135.3	135.4	0.0	40.3	44.4	-30.4	-30.4	70.7	44.4	115.2
1980/ 1/ 1	1259.12	1259.12	1259.11	1257.97	1257.97	1258.03	1258.00	1258.01	1257.97	1253.51	1249.96
5.850000	134.3	134.3	134.4	0.0	40.0	44.3	-30.4	-30.4	70.6	44.3	114.9
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1259.11	1259.11	1259.11	1257.92	1257.92	1257.97	1257.94	1257.96	1257.92	1253.47	1249.94
5.900000	134.0	134.0	134.1	0.0	40.0	44.2	-30.5	-30.5	70.4	44.2	114.6
1980/ 1/ 1	1259.10	1259.10	1259.10	1257.86	1257.86	1257.92	1257.89	1257.91	1257.86	1253.44	1249.93
5.950000	133.3	133.3	133.4	0.0	40.3	44.1	-29.8	-29.8	70.3	44.1	114.4
1980/ 1/ 1	1259.09	1259.09	1259.08	1257.81	1257.81	1257.87	1257.84	1257.85	1257.81	1253.41	1249.91
6.000000	132.3	132.3	132.5	0.0	40.7	44.0	-29.5	-29.5	70.1	44.0	114.1
1980/ 1/ 1	1259.08	1259.08	1259.08	1257.76	1257.76	1257.81	1257.78	1257.80	1257.76	1253.37	1249.90
6.050000	132.0	132.0	132.1	0.0	40.3	43.9	-29.4	-29.4	69.9	43.9	113.8
1980/ 1/ 1	1259.07	1259.07	1259.07	1257.70	1257.70	1257.76	1257.73	1257.75	1257.70	1253.34	1249.88
6.100000	131.3	131.3	131.4	0.0	40.1	43.8	-29.4	-29.4	69.8	43.8	113.5
1980/ 1/ 1	1259.05	1259.05	1259.05	1257.65	1257.65	1257.70	1257.68	1257.69	1257.65	1253.31	1249.86
6.150000	129.5	129.5	129.9	0.0	39.8	43.7	-29.8	-29.8	69.6	43.7	113.3
1980/ 1/ 1	1259.03	1259.03	1259.02	1257.59	1257.59	1257.65	1257.62	1257.64	1257.59	1253.27	1249.84
6.200000	127.6	127.6	127.9	0.0	39.1	43.6	-30.3	-30.3	69.4	43.6	113.0
1980/ 1/ 1	1259.00	1259.00	1259.00	1257.53	1257.53	1257.60	1257.56	1257.58	1257.53	1253.24	1249.83
6.250000	125.6	125.6	125.9	0.0	37.8	43.5	-31.2	-31.2	69.2	43.5	112.7
1980/ 1/ 1	1258.97	1258.97	1258.96	1257.47	1257.47	1257.54	1257.51	1257.53	1257.47	1253.20	1249.81
6.300000	122.8	122.8	123.3	0.0	36.4	43.4	-32.4	-32.4	69.1	43.4	112.4
1980/ 1/ 1	1258.92	1258.92	1258.91	1257.41	1257.41	1257.48	1257.45	1257.47	1257.41	1253.17	1249.78
6.350000	119.1	119.1	119.8	0.0	34.9	43.3	-33.8	-33.8	68.9	43.3	112.2
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN

	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1258.86	1258.86	1258.86	1257.35	1257.35	1257.43	1257.39	1257.41	1257.35	1253.13	1249.76
6.400000	115.1	115.1	115.8	0.0	33.3	43.2	-35.2	-35.2	68.7	43.2	111.9
1980/ 1/ 1	1258.80	1258.80	1258.80	1257.29	1257.29	1257.37	1257.33	1257.35	1257.29	1253.09	1249.74
6.450000	110.4	110.4	111.3	0.0	31.4	43.1	-37.0	-37.0	68.5	43.1	111.6
1980/ 1/ 1	1258.74	1258.74	1258.74	1257.22	1257.22	1257.31	1257.26	1257.29	1257.22	1253.05	1249.71
6.500000	106.2	106.2	106.9	0.0	29.8	43.0	-38.3	-38.3	68.3	43.0	111.3
1980/ 1/ 1	1258.69	1258.69	1258.69	1257.15	1257.15	1257.25	1257.20	1257.23	1257.15	1253.01	1249.69
6.550000	102.9	102.9	103.5	0.0	28.3	42.9	-39.6	-39.6	68.1	42.9	111.0
1980/ 1/ 1	1258.64	1258.64	1258.64	1257.09	1257.09	1257.19	1257.14	1257.17	1257.09	1252.97	1249.67
6.600000	99.1	99.1	99.8	0.0	27.7	42.8	-40.0	-40.0	67.9	42.8	110.7
1980/ 1/ 1	1258.60	1258.60	1258.59	1257.02	1257.02	1257.13	1257.08	1257.11	1257.02	1252.93	1249.64
6.650000	95.9	95.9	96.4	0.0	27.9	42.6	-39.7	-39.7	67.7	42.6	110.4
1980/ 1/ 1	1258.55	1258.55	1258.55	1256.95	1256.95	1257.07	1257.02	1257.05	1256.95	1252.89	1249.62
6.700000	92.9	92.9	93.4	0.0	27.8	42.5	-39.5	-39.5	67.5	42.5	110.0
1980/ 1/ 1	1258.51	1258.51	1258.51	1256.88	1256.88	1257.01	1256.96	1256.99	1256.88	1252.85	1249.60
6.750000	89.8	89.8	90.4	0.0	28.0	42.4	-39.5	-39.5	67.3	42.4	109.7
1980/ 1/ 1	1258.48	1258.48	1258.47	1256.81	1256.81	1256.95	1256.90	1256.92	1256.81	1252.81	1249.58
6.800000	87.6	87.6	88.0	0.0	26.9	42.3	-40.3	-40.3	67.0	42.3	109.4
1980/ 1/ 1	1258.45	1258.45	1258.45	1256.74	1256.74	1256.89	1256.84	1256.86	1256.74	1252.77	1249.56
6.850000	85.6	85.6	85.9	0.0	26.2	42.2	-40.4	-40.4	66.8	42.2	109.0
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1258.43	1258.43	1258.43	1256.66	1256.66	1256.83	1256.77	1256.80	1256.66	1252.74	1249.54
6.900000	84.3	84.3	84.5	0.0	26.3	42.1	-40.5	-40.5	66.6	42.1	108.7
1980/ 1/ 1	1258.42	1258.42	1258.41	1256.59	1256.59	1256.77	1256.71	1256.74	1256.59	1252.70	1249.52
6.950000	83.3	83.3	83.5	0.0	26.3	41.9	-40.4	-40.4	66.3	41.9	108.3
1980/ 1/ 1	1258.40	1258.40	1258.40	1256.52	1256.52	1256.71	1256.66	1256.69	1256.52	1252.66	1249.50
7.000000	82.3	82.3	82.5	0.0	26.7	41.8	-39.2	-39.2	66.1	41.8	107.9
1980/ 1/ 1	1258.39	1258.39	1258.38	1256.45	1256.45	1256.65	1256.60	1256.63	1256.45	1252.62	1249.48
7.050000	81.3	81.3	81.5	0.0	27.2	41.7	-38.3	-38.3	65.8	41.7	107.5
1980/ 1/ 1	1258.38	1258.38	1258.37	1256.37	1256.37	1256.59	1256.55	1256.57	1256.37	1252.59	1249.46
7.100000	80.3	80.3	80.5	0.0	29.0	41.6	-36.5	-36.5	65.5	41.6	107.2
1980/ 1/ 1	1258.37	1258.37	1258.37	1256.28	1256.28	1256.54	1256.50	1256.52	1256.28	1252.55	1249.44
7.150000	80.0	80.0	80.1	0.0	30.4	41.5	-34.9	-34.9	65.2	41.5	106.7
1980/ 1/ 1	1258.36	1258.36	1258.36	1256.20	1256.20	1256.48	1256.44	1256.46	1256.20	1252.51	1249.42
7.200000	79.3	79.3	79.4	0.0	29.7	41.4	-35.4	-35.4	64.9	41.4	106.3
1980/ 1/ 1	1258.36	1258.36	1258.35	1256.12	1256.12	1256.42	1256.38	1256.41	1256.12	1252.48	1249.40
7.250000	79.0	79.0	79.0	0.0	30.6	41.3	-34.8	-34.8	64.6	41.3	105.9
1980/ 1/ 1	1258.35	1258.35	1258.34	1256.03	1256.03	1256.37	1256.33	1256.35	1256.03	1252.44	1249.38
7.300000	78.3	78.3	78.4	0.0	29.8	41.2	-34.5	-34.5	64.3	41.2	105.5
1980/ 1/ 1	1258.34	1258.34	1258.34	1255.94	1255.94	1256.31	1256.28	1256.30	1255.94	1252.40	1249.36
7.350000	78.0	78.0	78.0	0.0	30.9	41.1	-33.3	-33.3	64.0	41.1	105.1
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1258.33	1258.33	1258.33	1255.84	1255.84	1256.26	1256.24	1256.25	1255.84	1252.37	1249.33
7.400000	77.3	77.3	77.4	0.0	37.3	41.0	-26.1	-26.1	63.6	41.0	104.6
1980/ 1/ 1	1258.33	1258.33	1258.32	1255.72	1255.72	1256.22	1256.20	1256.21	1255.72	1252.33	1249.31
7.450000	77.0	77.0	77.0	0.0	41.3	40.9	-21.7	-21.7	63.2	40.9	104.1
1980/ 1/ 1	1258.32	1258.32	1258.32	1255.60	1255.60	1256.17	1256.16	1256.17	1255.60	1252.30	1249.28
7.500000	76.3	76.3	76.4	0.0	44.9	40.9	-17.5	-17.5	62.7	40.9	103.5
1980/ 1/ 1	1258.31	1258.31	1258.31	1255.46	1255.46	1256.13	1256.12	1256.13	1255.46	1252.27	1249.26
7.550000	76.0	76.0	76.1	0.0	48.4	40.8	-13.5	-13.5	62.1	40.8	102.9
1980/ 1/ 1	1258.31	1258.31	1258.31	1255.30	1255.30	1256.09	1256.09	1256.09	1255.30	1252.23	1249.23
7.600000	76.0	76.0	76.0	0.0	51.6	40.8	-9.7	-9.7	61.5	40.8	102.3
1980/ 1/ 1	1258.30	1258.30	1258.30	1255.14	1255.14	1256.06	1256.06	1256.06	1255.14	1252.20	1249.19
7.650000	75.3	75.3	75.4	0.0	54.6	40.8	-6.1	-6.1	60.8	40.8	101.6
1980/ 1/ 1	1258.30	1258.30	1258.29	1254.97	1254.97	1256.03	1256.02	1256.03	1254.97	1252.16	1249.16
7.700000	75.0	75.0	75.1	0.0	57.3	40.8	-2.6	-2.6	60.1	40.8	100.9
1980/ 1/ 1	1258.29	1258.29	1258.28	1254.79	1254.79	1255.99	1255.99	1255.99	1254.79	1252.13	1249.13
7.750000	74.3	74.3	74.5	0.0	59.2	40.8	0.1	0.1	59.3	40.8	100.1
1980/ 1/ 1	1258.28	1258.28	1258.28	1254.60	1254.60	1255.96	1255.96	1255.96	1254.60	1252.10	1249.09
7.800000	74.0	74.0	74.1	0.0	58.4	40.8	0.1	0.1	58.5	40.8	99.4
1980/ 1/ 1	1258.27	1258.27	1258.27	1254.42	1254.42	1255.93	1255.93	1255.93	1254.42	1252.06	1249.06
7.850000	73.3	73.3	73.5	0.0	58.4	40.8	0.1	0.1	57.8	40.8	98.6
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1258.26	1258.26	1258.26	1254.23	1254.23	1255.90	1255.90	1255.90	1254.23	1252.03	1249.02
7.900000	73.0	73.0	73.1	0.0	56.8	40.8	0.1	0.1	56.9	40.8	97.7
1980/ 1/ 1	1258.25	1258.25	1258.25	1254.05	1254.05	1255.86	1255.86	1255.86	1254.05	1251.99	1248.98
7.950000	72.3	72.3	72.5	0.0	56.0	40.8	0.1	0.1	56.1	40.8	96.9
1980/ 1/ 1	1258.25	1258.25	1258.24	1253.86	1253.86	1255.83	1255.83	1255.83	1253.86	1251.96	1248.95
8.000000	72.0	72.0	72.1	0.0	56.0	40.8	0.1	0.1	55.3	40.8	96.1
1980/ 1/ 1	1258.25	1258.25	1258.24	1253.67	1253.67	1255.80	1255.80	1255.80	1253.67	1251.92	1248.91
8.050000	72.0	72.0	72.0	0.0	55.3	40.8	0.2	0.2	54.4	40.8	95.3
1980/ 1/ 1	1258.24	1258.24	1258.23	1253.49	1253.49	1255.77	1255.77	1255.77	1253.49	1251.89	1248.88
8.100000	71.3	71.3	71.5	0.0	54.0	40.8	0.1	0.1	53.6	40.8	94.4
1980/ 1/ 1	1258.23	1258.23	1258.22	1253.30	1253.30	1255.73	1255.73	1255.73	1253.30	1251.85	1248.84
8.150000	71.1	71.1	71.1	0.0	52.6	40.8	0.1	0.1	52.7	40.8	93.5
1980/ 1/ 1	1258.22	1258.22	1258.21	1253.12	1253.12	1255.70	1255.70	1255.70	1253.12	1251.83	1248.80
8.200000	70.3	70.3	70.5	0.0	51.7	40.8	0.1	0.1	51.8	40.8	92.6
1980/ 1/ 1	1258.21	1258.21	1258.21	1252.93	1252.93	1255.67	1255.67	1255.67	1252.93	1251.82	1248.76
8.250000	70.0	70.0	70.1	0.0	51.7	40.7	0.1	0.1	51.0	40.7	91.7
1980/ 1/ 1	1258.20	1258.20	1258.20	1252.75	1252.75	1255.63	1255.63	1255.63	1252.75	1251.80	1248.72

8.300000	69.3	69.3	69.5	0.0	51.0	40.6	0.2	0.2	50.0	40.6	90.6
1980/ 1/ 1	1258.20	1258.20	1258.19	1252.56	1252.56	1255.60	1255.60	1255.60	1252.56	1251.79	1248.68
8.350000	69.0	69.0	69.1	0.0	49.7	40.5	0.3	0.3	49.1	40.5	89.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1258.19	1258.19	1258.19	1252.38	1252.38	1255.57	1255.57	1255.57	1252.38	1251.77	1248.64
8.400000	69.0	69.0	69.0	0.0	48.1	40.4	0.1	0.1	48.2	40.4	88.6
1980/ 1/ 1	1258.19	1258.19	1258.18	1252.20	1252.20	1255.54	1255.54	1255.54	1252.20	1251.76	1248.60
8.450000	68.3	68.3	68.5	0.0	48.1	40.3	0.1	0.1	47.3	40.3	87.6
1980/ 1/ 1	1258.18	1258.18	1258.17	1252.01	1252.01	1255.51	1255.51	1255.51	1252.01	1251.75	1248.57
8.500000	68.1	68.1	68.1	0.0	46.2	40.2	0.1	0.1	46.3	40.2	86.5
1980/ 1/ 1	1258.17	1258.17	1258.16	1251.83	1251.83	1255.47	1255.47	1255.47	1251.83	1251.73	1248.53
8.550000	67.3	67.3	67.5	0.0	45.5	40.1	0.0	0.0	45.4	40.1	85.5
1980/ 1/ 1	1258.16	1258.16	1258.16	1251.65	1251.65	1255.44	1255.44	1255.44	1251.65	1251.72	1248.49
8.600000	67.0	67.0	67.1	0.0	44.2	40.0	0.2	0.2	44.3	40.0	84.4
1980/ 1/ 1	1258.16	1258.16	1258.16	1251.47	1251.47	1255.41	1255.41	1255.41	1251.47	1251.70	1248.45
8.650000	67.0	67.0	67.0	0.0	43.2	39.9	0.1	0.1	43.3	39.9	83.3
1980/ 1/ 1	1258.15	1258.15	1258.15	1251.28	1251.28	1255.38	1255.38	1255.38	1251.28	1251.69	1248.41
8.700000	66.3	66.3	66.5	0.0	43.6	39.8	0.0	0.0	42.3	39.8	82.2
1980/ 1/ 1	1258.15	1258.15	1258.14	1251.10	1251.10	1255.35	1255.35	1255.35	1251.10	1251.67	1248.37
8.750000	66.1	66.1	66.1	0.0	42.7	39.7	0.1	0.1	41.2	39.7	81.0
1980/ 1/ 1	1258.13	1258.13	1258.13	1250.92	1250.92	1255.31	1255.31	1255.31	1250.92	1251.66	1248.33
8.800000	65.3	65.3	65.5	0.0	40.6	39.6	0.1	0.1	40.1	39.6	79.8
1980/ 1/ 1	1258.13	1258.13	1258.12	1250.74	1250.74	1255.28	1255.28	1255.28	1250.74	1251.64	1248.30
8.850000	65.0	65.0	65.1	0.0	38.8	39.5	0.1	0.1	38.9	39.5	78.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1258.13	1258.13	1258.12	1250.57	1250.57	1255.25	1255.25	1255.25	1250.57	1251.63	1248.26
8.900000	65.0	65.0	65.0	0.0	37.6	39.4	0.1	0.1	37.7	39.4	77.4
1980/ 1/ 1	1258.12	1258.12	1258.11	1250.40	1250.40	1255.22	1255.22	1255.22	1250.40	1251.62	1248.22
8.950000	64.3	64.3	64.5	0.0	36.3	39.3	0.1	0.1	36.5	39.3	76.2
1980/ 1/ 1	1258.11	1258.11	1258.10	1250.23	1250.23	1255.19	1255.19	1255.19	1250.23	1251.60	1248.18
9.000000	64.0	64.0	64.1	0.0	35.0	39.2	0.1	0.1	35.1	39.2	74.9
1980/ 1/ 1	1258.11	1258.11	1258.10	1250.07	1250.07	1255.16	1255.16	1255.16	1250.07	1251.59	1248.14
9.050000	63.7	63.7	63.8	0.0	33.6	39.1	0.1	0.1	33.7	39.1	73.6
1980/ 1/ 1	1258.10	1258.10	1258.09	1249.91	1249.91	1255.12	1255.12	1255.12	1249.91	1251.57	1248.10
9.100000	63.2	63.2	63.3	0.0	32.1	39.0	0.1	0.1	32.3	39.0	72.1
1980/ 1/ 1	1258.09	1258.09	1258.08	1249.75	1249.75	1255.09	1255.09	1255.09	1249.75	1251.56	1248.05
9.150000	62.8	62.8	62.9	0.0	30.4	38.9	0.1	0.1	30.5	38.9	70.4
1980/ 1/ 1	1258.08	1258.08	1258.08	1249.60	1249.60	1255.06	1255.06	1255.06	1249.60	1251.55	1248.00
9.200000	62.3	62.3	62.4	0.0	28.3	38.9	0.1	0.1	28.5	38.9	68.3
1980/ 1/ 1	1258.08	1258.08	1258.07	1249.47	1249.47	1255.03	1255.03	1255.03	1249.47	1251.53	1247.94
9.250000	61.9	61.9	62.0	0.0	26.1	38.8	0.1	0.1	26.2	38.8	66.1
1980/ 1/ 1	1258.07	1258.07	1258.06	1249.34	1249.34	1255.00	1255.00	1255.00	1249.34	1251.52	1247.88
9.300000	61.4	61.4	61.5	0.0	23.9	38.7	0.1	0.1	24.0	38.7	63.8
1980/ 1/ 1	1258.06	1258.06	1258.05	1249.22	1249.22	1254.97	1254.97	1254.97	1249.22	1251.50	1247.82
9.350000	61.0	61.0	61.1	0.0	21.9	38.6	0.1	0.1	22.0	38.6	61.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1258.05	1258.05	1258.05	1249.11	1249.11	1254.94	1254.94	1254.94	1249.11	1251.49	1247.76
9.400000	60.5	60.5	60.6	0.0	19.9	38.5	0.1	0.1	20.0	38.5	59.6
1980/ 1/ 1	1258.05	1258.05	1258.04	1249.00	1249.00	1254.91	1254.91	1254.91	1249.00	1251.48	1247.71
9.450000	60.1	60.1	60.2	0.0	18.2	38.4	0.1	0.1	18.3	38.4	57.7
1980/ 1/ 1	1258.04	1258.04	1258.03	1248.91	1248.91	1254.88	1254.88	1254.88	1248.91	1251.46	1247.66
9.500000	59.6	59.6	59.7	0.0	16.6	38.3	0.1	0.1	16.7	38.3	55.9
1980/ 1/ 1	1258.03	1258.03	1258.02	1248.82	1248.82	1254.85	1254.85	1254.85	1248.82	1251.45	1247.61
9.550000	59.2	59.2	59.3	0.0	15.2	38.2	0.1	0.1	15.3	38.2	54.3
1980/ 1/ 1	1258.02	1258.02	1258.02	1248.74	1248.74	1254.82	1254.82	1254.82	1248.74	1251.43	1247.57
9.600000	58.7	58.7	58.8	0.0	13.9	38.1	0.1	0.1	14.0	38.1	52.9
1980/ 1/ 1	1258.01	1258.01	1258.01	1248.67	1248.67	1254.79	1254.79	1254.79	1248.67	1251.42	1247.54
9.650000	58.3	58.3	58.4	0.0	12.7	38.0	0.1	0.1	12.8	38.0	51.5
1980/ 1/ 1	1258.01	1258.01	1258.00	1248.60	1248.60	1254.76	1254.76	1254.76	1248.60	1251.41	1247.50
9.700000	57.8	57.8	57.9	0.0	11.6	37.9	0.1	0.1	11.7	37.9	50.3
1980/ 1/ 1	1258.00	1258.00	1257.99	1248.54	1248.54	1254.72	1254.72	1254.72	1248.54	1251.39	1247.47
9.750000	57.4	57.4	57.5	0.0	10.7	37.8	0.1	0.1	10.8	37.8	49.2
1980/ 1/ 1	1257.99	1257.99	1257.98	1248.48	1248.48	1254.69	1254.69	1254.69	1248.48	1251.38	1247.44
9.800000	56.9	56.9	57.0	0.0	9.8	37.7	0.1	0.1	9.9	37.7	48.2
1980/ 1/ 1	1257.98	1257.98	1257.98	1248.42	1248.42	1254.66	1254.66	1254.66	1248.42	1251.37	1247.41
9.850000	56.5	56.5	56.6	0.0	9.0	37.6	0.1	0.1	9.1	37.6	47.3
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.98	1257.98	1257.97	1248.37	1248.37	1254.63	1254.63	1254.63	1248.37	1251.35	1247.39
9.900000	56.0	56.0	56.1	0.0	8.3	37.5	0.1	0.1	8.4	37.5	46.4
1980/ 1/ 1	1257.97	1257.97	1257.96	1248.33	1248.33	1254.60	1254.60	1254.60	1248.33	1251.34	1247.37
9.950000	55.6	55.6	55.7	0.0	7.7	37.4	0.1	0.1	7.8	37.4	45.7
1980/ 1/ 1	1257.96	1257.96	1257.95	1248.28	1248.28	1254.57	1254.57	1254.57	1248.28	1251.32	1247.35
10.000000	55.1	55.1	55.2	0.0	7.1	37.3	0.1	0.1	7.2	37.3	45.0
1980/ 1/ 1	1257.95	1257.95	1257.95	1248.24	1248.24	1254.54	1254.54	1254.54	1248.24	1251.31	1247.33
10.050000	54.7	54.7	54.8	0.0	6.6	37.2	0.1	0.1	6.7	37.2	44.3
1980/ 1/ 1	1257.95	1257.95	1257.94	1248.21	1248.21	1254.51	1254.51	1254.51	1248.21	1251.30	1247.31
10.100000	54.2	54.2	54.3	0.0	6.1	37.1	0.1	0.1	6.2	37.1	43.7
1980/ 1/ 1	1257.94	1257.94	1257.93	1248.17	1248.17	1254.49	1254.49	1254.49	1248.17	1251.28	1247.29
10.150000	53.8	53.8	53.9	0.0	5.7	37.0	0.1	0.1	5.8	37.0	43.2
1980/ 1/ 1	1257.93	1257.93	1257.92	1248.14	1248.14	1254.46	1254.46	1254.46	1248.14	1251.27	1247.28

10.200000	53.4	53.4	53.4	0.0	5.4	36.9	0.1	0.1	5.4	36.9	42.7
1980/ 1/ 1	1257.92	1257.92	1257.92	1248.11	1248.11	1254.43	1254.43	1254.43	1248.11	1251.26	1247.26
10.250000	52.9	52.9	53.0	0.0	5.0	36.8	0.1	0.1	5.1	36.8	42.2
1980/ 1/ 1	1257.92	1257.92	1257.91	1248.08	1248.08	1254.40	1254.40	1254.40	1248.08	1251.24	1247.25
10.300000	52.4	52.4	52.5	0.0	4.6	36.7	0.1	0.1	4.7	36.7	41.8
1980/ 1/ 1	1257.91	1257.91	1257.90	1248.05	1248.05	1254.37	1254.37	1254.37	1248.05	1251.23	1247.24
10.350000	52.0	52.0	52.1	0.0	4.4	36.7	0.1	0.1	4.5	36.7	41.4
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.90	1257.90	1257.89	1248.03	1248.03	1254.34	1254.34	1254.34	1248.03	1251.22	1247.23
10.400000	51.5	51.5	51.6	0.0	4.1	36.6	0.1	0.1	4.2	36.6	41.0
1980/ 1/ 1	1257.89	1257.89	1257.88	1248.00	1248.00	1254.31	1254.31	1254.31	1248.00	1251.20	1247.22
10.450000	51.0	51.0	51.2	0.0	3.9	36.5	0.1	0.1	3.9	36.5	40.6
1980/ 1/ 1	1257.88	1257.88	1257.88	1247.98	1247.98	1254.28	1254.28	1254.28	1247.98	1251.19	1247.21
10.500000	50.7	50.7	50.8	0.0	3.6	36.4	0.1	0.1	3.7	36.4	40.3
1980/ 1/ 1	1257.88	1257.88	1257.87	1247.96	1247.96	1254.25	1254.25	1254.25	1247.96	1251.18	1247.20
10.550000	50.2	50.2	50.3	0.0	3.4	36.3	0.1	0.1	3.5	36.3	39.9
1980/ 1/ 1	1257.87	1257.87	1257.86	1247.94	1247.94	1254.22	1254.22	1254.22	1247.94	1251.16	1247.19
10.600000	49.8	49.8	49.8	0.0	3.1	36.2	0.1	0.1	3.3	36.2	39.6
1980/ 1/ 1	1257.86	1257.86	1257.85	1247.92	1247.92	1254.19	1254.19	1254.19	1247.92	1251.15	1247.18
10.650000	49.3	49.3	49.4	0.0	3.0	36.1	0.1	0.1	3.1	36.1	39.3
1980/ 1/ 1	1257.85	1257.85	1257.85	1247.90	1247.90	1254.16	1254.16	1254.16	1247.90	1251.14	1247.17
10.700000	48.8	48.8	48.9	0.0	2.8	36.0	0.1	0.1	2.9	36.0	39.1
1980/ 1/ 1	1257.85	1257.85	1257.84	1247.88	1247.88	1254.14	1254.14	1254.14	1247.88	1251.13	1247.16
10.750000	48.4	48.4	48.5	0.0	2.6	35.9	0.1	0.1	2.7	35.9	38.8
1980/ 1/ 1	1257.84	1257.84	1257.83	1247.86	1247.86	1254.11	1254.11	1254.11	1247.86	1251.11	1247.15
10.800000	47.9	47.9	48.0	0.0	2.5	35.8	0.1	0.1	2.6	35.8	38.5
1980/ 1/ 1	1257.83	1257.83	1257.82	1247.84	1247.84	1254.08	1254.08	1254.08	1247.84	1251.10	1247.14
10.850000	47.5	47.5	47.6	0.0	2.3	35.7	0.1	0.1	2.4	35.7	38.3
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.82	1257.82	1257.82	1247.82	1247.82	1254.05	1254.05	1254.05	1247.82	1251.09	1247.14
10.900000	47.0	47.0	47.1	0.0	2.2	35.6	0.1	0.1	2.3	35.6	38.0
1980/ 1/ 1	1257.82	1257.82	1257.81	1247.81	1247.81	1254.02	1254.02	1254.02	1247.81	1251.07	1247.13
10.950000	46.5	46.5	46.6	0.0	2.1	35.5	0.1	0.1	2.1	35.5	37.8
1980/ 1/ 1	1257.81	1257.81	1257.80	1247.79	1247.79	1253.99	1253.99	1253.99	1247.79	1251.06	1247.12
11.000000	46.2	46.2	46.3	0.0	2.0	35.4	0.1	0.1	2.0	35.4	37.6
1980/ 1/ 1	1257.80	1257.80	1257.79	1247.77	1247.77	1253.96	1253.96	1253.96	1247.77	1251.05	1247.11
11.050000	45.6	45.6	45.7	0.0	1.8	35.3	0.1	0.1	1.9	35.3	37.3
1980/ 1/ 1	1257.79	1257.79	1257.78	1247.76	1247.76	1253.93	1253.93	1253.93	1247.76	1251.03	1247.11
11.100000	45.1	45.1	45.2	0.0	1.8	35.2	0.1	0.1	1.8	35.2	37.1
1980/ 1/ 1	1257.78	1257.78	1257.77	1247.74	1247.74	1253.90	1253.90	1253.90	1247.74	1251.02	1247.10
11.150000	44.5	44.5	44.6	0.0	1.7	35.1	0.1	0.1	1.7	35.1	36.9
1980/ 1/ 1	1257.77	1257.77	1257.76	1247.73	1247.73	1253.87	1253.87	1253.87	1247.73	1251.00	1247.09
11.200000	43.9	43.9	44.1	0.0	1.5	35.0	0.1	0.1	1.6	35.0	36.7
1980/ 1/ 1	1257.76	1257.76	1257.76	1247.71	1247.71	1253.84	1253.84	1253.84	1247.71	1250.99	1247.09
11.250000	43.5	43.5	43.6	0.0	1.5	34.9	0.1	0.1	1.5	34.9	36.5
1980/ 1/ 1	1257.76	1257.76	1257.74	1247.70	1247.70	1253.81	1253.81	1253.81	1247.70	1250.98	1247.08
11.300000	42.8	42.8	43.0	0.0	1.3	34.8	0.1	0.1	1.4	34.8	36.3
1980/ 1/ 1	1257.75	1257.75	1257.74	1247.68	1247.68	1253.77	1253.77	1253.77	1247.68	1250.96	1247.07
11.350000	42.4	42.4	42.5	0.0	1.2	34.7	0.1	0.1	1.3	34.7	36.1
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.74	1257.74	1257.72	1247.67	1247.67	1253.74	1253.74	1253.74	1247.67	1250.95	1247.07
11.400000	41.8	41.8	41.9	0.0	1.2	34.6	0.1	0.1	1.2	34.6	35.9
1980/ 1/ 1	1257.73	1257.73	1257.71	1247.66	1247.66	1253.71	1253.71	1253.71	1247.66	1250.93	1247.06
11.450000	41.2	41.2	41.3	0.0	1.1	34.5	0.1	0.1	1.1	34.5	35.7
1980/ 1/ 1	1257.72	1257.72	1257.71	1247.65	1247.65	1253.68	1253.68	1253.68	1247.65	1250.92	1247.06
11.500000	40.7	40.7	40.8	0.0	1.0	34.4	0.1	0.1	1.1	34.4	35.5
1980/ 1/ 1	1257.71	1257.71	1257.69	1247.64	1247.64	1253.65	1253.65	1253.65	1247.64	1250.91	1247.05
11.550000	40.1	40.1	40.3	0.0	1.0	34.3	0.1	0.1	1.0	34.3	35.4
1980/ 1/ 1	1257.70	1257.70	1257.68	1247.63	1247.63	1253.62	1253.62	1253.62	1247.63	1250.89	1247.05
11.600000	39.6	39.6	39.7	0.0	0.9	34.2	0.1	0.1	1.0	34.2	35.2
1980/ 1/ 1	1257.69	1257.69	1257.68	1247.61	1247.61	1253.59	1253.59	1253.59	1247.61	1250.88	1247.04
11.650000	39.0	39.0	39.2	0.0	0.9	34.1	0.1	0.1	0.9	34.1	35.0
1980/ 1/ 1	1257.68	1257.68	1257.66	1247.60	1247.60	1253.56	1253.56	1253.56	1247.60	1250.86	1247.04
11.700000	38.5	38.5	38.6	0.0	0.8	34.0	0.1	0.1	0.8	34.0	34.9
1980/ 1/ 1	1257.67	1257.67	1257.66	1247.59	1247.59	1253.53	1253.53	1253.53	1247.59	1250.85	1247.03
11.750000	37.9	37.9	38.1	0.0	0.8	33.8	0.1	0.1	0.8	33.8	34.7
1980/ 1/ 1	1257.66	1257.66	1257.64	1247.58	1247.58	1253.50	1253.50	1253.50	1247.58	1250.84	1247.03
11.800000	37.4	37.4	37.5	0.0	0.7	33.7	0.1	0.1	0.7	33.7	34.6
1980/ 1/ 1	1257.65	1257.65	1257.64	1247.57	1247.57	1253.47	1253.47	1253.47	1247.57	1250.82	1247.02
11.850000	36.8	36.8	37.0	0.0	0.6	33.6	0.1	0.1	0.7	33.6	34.4
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.64	1257.64	1257.62	1247.57	1247.57	1253.44	1253.44	1253.44	1247.57	1250.81	1247.02
11.900000	36.3	36.3	36.4	0.0	0.6	33.5	0.1	0.1	0.7	33.5	34.3
1980/ 1/ 1	1257.63	1257.63	1257.61	1247.56	1247.56	1253.41	1253.41	1253.41	1247.56	1250.80	1247.01
11.950000	35.7	35.7	35.9	0.0	0.5	33.4	0.1	0.1	0.6	33.4	34.1
1980/ 1/ 1	1257.62	1257.62	1257.60	1247.55	1247.55	1253.38	1253.38	1253.38	1247.55	1250.78	1247.01
12.000000	35.2	35.2	35.3	0.0	0.5	33.3	0.1	0.1	0.6	33.3	34.0
1980/ 1/ 1	1257.61	1257.61	1257.60	1247.54	1247.54	1253.35	1253.35	1253.35	1247.54	1250.77	1247.00
12.050000	34.7	34.7	34.8	0.0	0.5	33.2	0.1	0.1	0.6	33.2	33.8
1980/ 1/ 1	1257.60	1257.60	1257.59	1247.53	1247.53	1253.32	1253.32	1253.32	1247.53	1250.76	1247.00

12.100000	34.3	34.3	34.4	0.0	0.4	33.1	0.1	0.1	0.5	33.1	33.7
1980/ 1/ 1	1257.60	1257.60	1257.58	1247.53	1247.53	1253.29	1253.29	1253.29	1247.53	1250.74	1246.99
12.150000	33.8	33.8	33.9	0.0	0.4	33.0	0.1	0.2	0.5	33.0	33.6
1980/ 1/ 1	1257.59	1257.59	1257.57	1247.52	1247.52	1253.27	1253.27	1253.27	1247.52	1250.73	1246.99
12.200000	33.3	33.3	33.4	0.0	0.4	32.9	0.1	0.2	0.5	32.9	33.4
1980/ 1/ 1	1257.58	1257.58	1257.56	1247.51	1247.51	1253.24	1253.24	1253.24	1247.51	1250.72	1246.98
12.250000	32.9	32.9	33.0	0.0	0.4	32.8	0.1	0.2	0.5	32.8	33.3
1980/ 1/ 1	1257.57	1257.57	1257.55	1247.51	1247.51	1253.21	1253.21	1253.21	1247.51	1250.70	1246.98
12.300000	32.4	32.4	32.5	0.0	0.3	32.7	0.1	0.2	0.4	32.7	33.2
1980/ 1/ 1	1257.56	1257.56	1257.55	1247.50	1247.50	1253.18	1253.18	1253.18	1247.50	1250.69	1246.98
12.350000	32.0	32.0	32.1	0.0	0.3	32.6	0.1	0.2	0.4	32.6	33.0
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.56	1257.56	1257.54	1247.50	1247.50	1253.15	1253.15	1253.15	1247.50	1250.68	1246.97
12.400000	31.5	31.5	31.6	0.0	0.3	32.5	0.1	0.3	0.4	32.5	32.9
1980/ 1/ 1	1257.55	1257.55	1257.53	1247.49	1247.49	1253.12	1253.12	1253.12	1247.49	1250.66	1246.97
12.450000	31.1	31.1	31.2	0.0	0.3	32.4	0.1	0.3	0.4	32.4	32.8
1980/ 1/ 1	1257.54	1257.54	1257.52	1247.48	1247.48	1253.09	1253.09	1253.09	1247.48	1250.65	1246.96
12.500000	30.6	30.6	30.7	0.0	0.3	32.3	0.1	0.3	0.4	32.3	32.7
1980/ 1/ 1	1257.53	1257.53	1257.51	1247.48	1247.48	1253.06	1253.06	1253.06	1247.48	1250.64	1246.96
12.550000	30.2	30.2	30.3	0.0	0.2	32.2	0.1	0.3	0.3	32.2	32.6
1980/ 1/ 1	1257.52	1257.52	1257.51	1247.48	1247.48	1253.04	1253.04	1253.04	1247.48	1250.62	1246.96
12.600000	29.7	29.7	29.8	0.0	0.2	32.1	0.1	0.3	0.3	32.1	32.4
1980/ 1/ 1	1257.51	1257.51	1257.49	1247.47	1247.47	1253.01	1253.01	1253.01	1247.47	1250.61	1246.95
12.650000	29.4	29.4	29.5	0.0	0.2	32.0	0.1	0.3	0.3	32.0	32.3
1980/ 1/ 1	1257.50	1257.50	1257.48	1247.47	1247.47	1252.98	1252.98	1252.98	1247.47	1250.60	1246.95
12.700000	28.9	28.9	29.0	0.0	0.2	31.9	0.1	0.4	0.3	31.9	32.2
1980/ 1/ 1	1257.49	1257.49	1257.47	1247.46	1247.46	1252.95	1252.95	1252.95	1247.46	1250.58	1246.94
12.750000	28.5	28.5	28.6	0.0	0.2	31.8	0.1	0.4	0.3	31.8	32.1
1980/ 1/ 1	1257.48	1257.48	1257.46	1247.46	1247.46	1252.92	1252.92	1252.92	1247.46	1250.57	1246.94
12.800000	28.0	28.0	28.1	0.0	0.2	31.7	0.1	0.4	0.3	31.7	32.0
1980/ 1/ 1	1257.47	1257.47	1257.45	1247.45	1247.45	1252.90	1252.90	1252.90	1247.45	1250.56	1246.94
12.850000	27.5	27.5	27.7	0.0	0.2	31.6	0.1	0.4	0.3	31.6	31.9
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.46	1257.46	1257.43	1247.45	1247.45	1252.87	1252.87	1252.87	1247.45	1250.55	1246.93
12.900000	27.1	27.1	27.2	0.0	0.2	31.5	0.1	0.4	0.2	31.5	31.8
1980/ 1/ 1	1257.44	1257.44	1257.42	1247.45	1247.45	1252.84	1252.84	1252.84	1247.45	1250.53	1246.93
12.950000	26.6	26.6	26.8	0.0	0.1	31.4	0.1	0.4	0.2	31.4	31.6
1980/ 1/ 1	1257.43	1257.43	1257.41	1247.44	1247.44	1252.81	1252.81	1252.81	1247.44	1250.52	1246.92
13.000000	26.2	26.2	26.3	0.0	0.1	31.3	0.1	0.4	0.2	31.3	31.5
1980/ 1/ 1	1257.43	1257.43	1257.40	1247.44	1247.44	1252.79	1252.79	1252.79	1247.44	1250.51	1246.92
13.050000	25.9	25.9	26.0	0.0	0.1	31.2	0.1	0.5	0.2	31.2	31.4
1980/ 1/ 1	1257.42	1257.42	1257.40	1247.44	1247.44	1252.76	1252.76	1252.76	1247.44	1250.49	1246.92
13.100000	25.8	25.8	25.8	0.0	0.1	31.1	0.1	0.5	0.2	31.1	31.3
1980/ 1/ 1	1257.42	1257.42	1257.39	1247.43	1247.43	1252.73	1252.73	1252.73	1247.43	1250.48	1246.91
13.150000	25.6	25.6	25.7	0.0	0.1	31.0	0.1	0.5	0.2	31.0	31.2
1980/ 1/ 1	1257.41	1257.41	1257.39	1247.43	1247.43	1252.70	1252.70	1252.70	1247.43	1250.47	1246.91
13.200000	25.5	25.5	25.5	0.0	0.1	30.9	0.1	0.5	0.2	30.9	31.1
1980/ 1/ 1	1257.41	1257.41	1257.39	1247.43	1247.43	1252.68	1252.68	1252.68	1247.43	1250.46	1246.91
13.250000	25.3	25.3	25.4	0.0	0.1	30.8	0.1	0.5	0.2	30.8	31.0
1980/ 1/ 1	1257.41	1257.41	1257.38	1247.43	1247.43	1252.65	1252.65	1252.65	1247.43	1250.44	1246.90
13.300000	25.2	25.2	25.2	0.0	0.1	30.7	0.1	0.5	0.2	30.7	30.9
1980/ 1/ 1	1257.40	1257.40	1257.38	1247.42	1247.42	1252.62	1252.62	1252.62	1247.42	1250.43	1246.90
13.350000	25.0	25.0	25.1	0.0	0.1	30.6	0.1	0.5	0.2	30.6	30.8
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.40	1257.40	1257.38	1247.42	1247.42	1252.60	1252.60	1252.60	1247.42	1250.42	1246.90
13.400000	24.9	24.9	24.9	0.0	0.1	30.5	0.1	0.5	0.2	30.5	30.7
1980/ 1/ 1	1257.40	1257.40	1257.37	1247.42	1247.42	1252.57	1252.57	1252.57	1247.42	1250.41	1246.89
13.450000	24.7	24.7	24.8	0.0	0.1	30.4	0.1	0.5	0.2	30.4	30.6
1980/ 1/ 1	1257.39	1257.39	1257.37	1247.42	1247.42	1252.54	1252.54	1252.54	1247.42	1250.39	1246.89
13.500000	24.6	24.6	24.6	0.0	0.1	30.3	0.1	0.5	0.2	30.3	30.5
1980/ 1/ 1	1257.39	1257.39	1257.36	1247.42	1247.42	1252.52	1252.52	1252.52	1247.42	1250.38	1246.89
13.550000	24.4	24.4	24.5	0.0	0.1	30.2	0.1	0.5	0.2	30.2	30.4
1980/ 1/ 1	1257.39	1257.39	1257.36	1247.41	1247.41	1252.49	1252.49	1252.49	1247.41	1250.37	1246.88
13.600000	24.3	24.3	24.3	0.0	0.1	30.1	0.1	0.5	0.2	30.1	30.3
1980/ 1/ 1	1257.38	1257.38	1257.36	1247.41	1247.41	1252.46	1252.46	1252.46	1247.41	1250.36	1246.88
13.650000	24.1	24.1	24.2	0.0	0.1	30.0	0.1	0.5	0.2	30.0	30.1
1980/ 1/ 1	1257.38	1257.38	1257.35	1247.41	1247.41	1252.44	1252.44	1252.44	1247.41	1250.34	1246.88
13.700000	24.0	24.0	24.0	0.0	0.1	29.9	0.1	0.5	0.2	29.9	30.0
1980/ 1/ 1	1257.38	1257.38	1257.35	1247.41	1247.41	1252.41	1252.41	1252.41	1247.41	1250.33	1246.87
13.750000	23.8	23.8	23.9	0.0	0.1	29.8	0.1	0.5	0.1	29.8	29.9
1980/ 1/ 1	1257.37	1257.37	1257.35	1247.41	1247.41	1252.39	1252.39	1252.39	1247.41	1250.32	1246.87
13.800000	23.7	23.7	23.7	0.0	0.0	29.7	0.1	0.5	0.1	29.7	29.8
1980/ 1/ 1	1257.37	1257.37	1257.34	1247.41	1247.41	1252.36	1252.36	1252.36	1247.41	1250.31	1246.86
13.850000	23.5	23.5	23.6	0.0	0.0	29.6	0.1	0.5	0.1	29.6	29.7
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.36	1257.36	1257.34	1247.40	1247.40	1252.33	1252.33	1252.33	1247.40	1250.29	1246.86
13.900000	23.4	23.4	23.4	0.0	0.0	29.5	0.1	0.5	0.1	29.5	29.6
1980/ 1/ 1	1257.36	1257.36	1257.33	1247.40	1247.40	1252.31	1252.31	1252.31	1247.40	1250.28	1246.86
13.950000	23.2	23.2	23.3	0.0	0.0	29.4	0.1	0.5	0.1	29.4	29.5
1980/ 1/ 1	1257.36	1257.36	1257.33	1247.40	1247.40	1252.28	1252.28	1252.28	1247.40	1250.27	1246.85

14.000000	23.1	23.1	23.1	0.0	0.0	29.3	0.1	0.6	0.1	29.3	29.4
1980/ 1/ 1	1257.36	1257.36	1257.33	1247.40	1247.40	1252.26	1252.26	1252.26	1247.40	1250.26	1246.85
14.050000	23.0	23.0	23.0	0.0	0.0	29.2	0.1	0.6	0.1	29.2	29.3
1980/ 1/ 1	1257.35	1257.35	1257.33	1247.40	1247.40	1252.23	1252.23	1252.23	1247.40	1250.25	1246.85
14.100000	22.9	22.9	22.9	0.0	0.0	29.1	0.1	0.6	0.1	29.1	29.2
1980/ 1/ 1	1257.35	1257.35	1257.32	1247.40	1247.40	1252.21	1252.21	1252.21	1247.40	1250.23	1246.84
14.150000	22.9	22.9	22.9	0.0	0.0	29.0	0.1	0.6	0.1	29.0	29.1
1980/ 1/ 1	1257.35	1257.35	1257.32	1247.40	1247.40	1252.18	1252.18	1252.18	1247.40	1250.22	1246.84
14.200000	22.8	22.8	22.8	0.0	0.0	28.9	0.1	0.6	0.1	28.9	29.0
1980/ 1/ 1	1257.35	1257.35	1257.32	1247.40	1247.40	1252.16	1252.16	1252.16	1247.40	1250.21	1246.84
14.250000	22.8	22.8	22.8	0.0	0.0	28.8	0.1	0.6	0.1	28.8	28.9
1980/ 1/ 1	1257.35	1257.35	1257.32	1247.40	1247.40	1252.13	1252.13	1252.13	1247.40	1250.20	1246.83
14.300000	22.7	22.7	22.7	0.0	0.0	28.7	0.1	0.6	0.1	28.7	28.8
1980/ 1/ 1	1257.35	1257.35	1257.32	1247.39	1247.39	1252.11	1252.11	1252.11	1247.39	1250.19	1246.83
14.350000	22.7	22.7	22.7	0.0	0.0	28.6	0.1	0.6	0.1	28.6	28.7
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.35	1257.35	1257.32	1247.39	1247.39	1252.08	1252.08	1252.08	1247.39	1250.17	1246.83
14.400000	22.6	22.6	22.6	0.0	0.0	28.5	0.1	0.6	0.1	28.5	28.6
1980/ 1/ 1	1257.35	1257.35	1257.32	1247.39	1247.39	1252.06	1252.06	1252.06	1247.39	1250.16	1246.82
14.450000	22.6	22.6	22.6	0.0	0.0	28.4	0.1	0.6	0.1	28.4	28.5
1980/ 1/ 1	1257.34	1257.34	1257.32	1247.39	1247.39	1252.03	1252.03	1252.03	1247.39	1250.15	1246.82
14.500000	22.5	22.5	22.5	0.0	0.0	28.3	0.1	0.6	0.1	28.3	28.4
1980/ 1/ 1	1257.34	1257.34	1257.32	1247.39	1247.39	1252.01	1252.01	1252.01	1247.39	1250.14	1246.82
14.550000	22.5	22.5	22.5	0.0	0.0	28.2	0.1	0.6	0.1	28.2	28.3
1980/ 1/ 1	1257.34	1257.34	1257.31	1247.39	1247.39	1251.98	1251.98	1251.98	1247.39	1250.13	1246.81
14.600000	22.4	22.4	22.4	0.0	0.0	28.1	0.1	0.6	0.1	28.1	28.2
1980/ 1/ 1	1257.34	1257.34	1257.31	1247.39	1247.39	1251.96	1251.96	1251.96	1247.39	1250.11	1246.81
14.650000	22.4	22.4	22.4	0.0	0.0	28.0	0.1	0.7	0.1	28.0	28.1
1980/ 1/ 1	1257.34	1257.34	1257.31	1247.39	1247.39	1251.93	1251.93	1251.93	1247.39	1250.10	1246.81
14.700000	22.3	22.3	22.3	0.0	0.0	27.9	0.1	0.6	0.1	27.9	28.0
1980/ 1/ 1	1257.34	1257.34	1257.31	1247.39	1247.39	1251.90	1251.90	1251.90	1247.39	1250.09	1246.80
14.750000	22.3	22.3	22.3	0.0	0.0	27.8	0.1	0.6	0.1	27.8	27.9
1980/ 1/ 1	1257.34	1257.34	1257.31	1247.39	1247.39	1251.88	1251.88	1251.88	1247.39	1250.08	1246.80
14.800000	22.2	22.2	22.2	0.0	0.0	27.7	0.1	0.6	0.1	27.7	27.8
1980/ 1/ 1	1257.34	1257.34	1257.31	1247.39	1247.39	1251.85	1251.85	1251.85	1247.39	1250.06	1246.80
14.850000	22.2	22.2	22.2	0.0	0.0	27.6	0.1	0.6	0.1	27.6	27.7
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.34	1257.34	1257.31	1247.39	1247.39	1251.82	1251.82	1251.82	1247.39	1250.05	1246.79
14.900000	22.1	22.1	22.1	0.0	0.0	27.4	0.1	0.6	0.1	27.4	27.6
1980/ 1/ 1	1257.33	1257.33	1257.31	1247.39	1247.39	1251.80	1251.80	1251.80	1247.39	1250.04	1246.79
14.950000	22.1	22.1	22.1	0.0	0.0	27.3	0.1	0.6	0.1	27.3	27.5
1980/ 1/ 1	1257.33	1257.33	1257.30	1247.39	1247.39	1251.77	1251.77	1251.77	1247.39	1250.03	1246.78
15.000000	22.0	22.0	22.0	0.0	0.0	27.2	0.1	0.6	0.1	27.2	27.4
1980/ 1/ 1	1257.33	1257.33	1257.30	1247.39	1247.39	1251.74	1251.74	1251.74	1247.39	1250.01	1246.78
15.050000	21.9	21.9	22.0	0.0	0.0	27.1	0.1	0.6	0.1	27.1	27.3
1980/ 1/ 1	1257.33	1257.33	1257.30	1247.39	1247.39	1251.72	1251.72	1251.72	1247.39	1250.00	1246.78
15.100000	21.8	21.8	21.9	0.0	0.0	27.0	0.1	0.6	0.1	27.0	27.1
1980/ 1/ 1	1257.33	1257.33	1257.30	1247.39	1247.39	1251.69	1251.69	1251.69	1247.39	1249.99	1246.77
15.150000	21.7	21.7	21.8	0.0	0.0	26.9	0.1	0.6	0.1	26.9	27.0
1980/ 1/ 1	1257.33	1257.33	1257.30	1247.39	1247.39	1251.67	1251.67	1251.67	1247.39	1249.97	1246.77
15.200000	21.6	21.6	21.7	0.0	0.0	26.8	0.1	0.6	0.1	26.8	26.9
1980/ 1/ 1	1257.32	1257.32	1257.29	1247.39	1247.39	1251.64	1251.64	1251.64	1247.39	1249.96	1246.77
15.250000	21.5	21.5	21.6	0.0	0.0	26.7	0.1	0.6	0.1	26.7	26.8
1980/ 1/ 1	1257.32	1257.32	1257.29	1247.39	1247.39	1251.61	1251.61	1251.61	1247.39	1249.95	1246.76
15.300000	21.4	21.4	21.5	0.0	0.0	26.6	0.1	0.6	0.1	26.6	26.7
1980/ 1/ 1	1257.32	1257.32	1257.29	1247.39	1247.39	1251.59	1251.59	1251.59	1247.39	1249.94	1246.76
15.350000	21.3	21.3	21.4	0.0	0.0	26.5	0.1	0.6	0.1	26.5	26.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.32	1257.32	1257.29	1247.39	1247.39	1251.56	1251.56	1251.56	1247.39	1249.92	1246.75
15.400000	21.2	21.2	21.3	0.0	0.0	26.4	0.1	0.6	0.1	26.4	26.5
1980/ 1/ 1	1257.31	1257.31	1257.28	1247.39	1247.39	1251.54	1251.54	1251.54	1247.39	1249.91	1246.75
15.450000	21.1	21.1	21.2	0.0	0.0	26.3	0.1	0.6	0.1	26.3	26.4
1980/ 1/ 1	1257.31	1257.31	1257.28	1247.38	1247.38	1251.51	1251.51	1251.51	1247.38	1249.90	1246.75
15.500000	21.0	21.0	21.1	0.0	0.0	26.2	0.1	0.6	0.1	26.2	26.3
1980/ 1/ 1	1257.31	1257.31	1257.28	1247.38	1247.38	1251.49	1251.49	1251.49	1247.38	1249.89	1246.74
15.550000	20.9	20.9	21.0	0.0	0.0	26.1	0.1	0.6	0.1	26.1	26.2
1980/ 1/ 1	1257.31	1257.31	1257.28	1247.38	1247.38	1251.46	1251.46	1251.46	1247.38	1249.87	1246.74
15.600000	20.8	20.8	20.9	0.0	0.0	26.0	0.1	0.6	0.1	26.0	26.1
1980/ 1/ 1	1257.31	1257.31	1257.27	1247.38	1247.38	1251.44	1251.44	1251.44	1247.38	1249.86	1246.74
15.650000	20.7	20.7	20.8	0.0	0.0	25.9	0.1	0.6	0.1	25.9	26.0
1980/ 1/ 1	1257.30	1257.30	1257.27	1247.38	1247.38	1251.41	1251.41	1251.41	1247.38	1249.85	1246.73
15.700000	20.6	20.6	20.7	0.0	0.0	25.8	0.1	0.6	0.1	25.8	25.9
1980/ 1/ 1	1257.30	1257.30	1257.27	1247.38	1247.38	1251.39	1251.39	1251.39	1247.38	1249.84	1246.73
15.750000	20.5	20.5	20.6	0.0	0.0	25.7	0.1	0.6	0.1	25.7	25.8
1980/ 1/ 1	1257.30	1257.30	1257.27	1247.38	1247.38	1251.36	1251.36	1251.36	1247.38	1249.83	1246.72
15.800000	20.4	20.4	20.5	0.0	0.0	25.5	0.1	0.6	0.1	25.5	25.7
1980/ 1/ 1	1257.30	1257.30	1257.26	1247.38	1247.38	1251.34	1251.34	1251.34	1247.38	1249.81	1246.72
15.850000	20.3	20.3	20.4	0.0	0.0	25.4	0.1	0.6	0.1	25.4	25.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.29	1257.29	1257.26	1247.38	1247.38	1251.31	1251.31	1251.31	1247.38	1249.80	1246.72

15.900000	20.2	20.2	20.3	0.0	0.0	25.3	0.1	0.6	0.1	25.3	25.5
1980/ 1/ 1	1257.29	1257.29	1257.26	1247.38	1247.38	1251.29	1251.29	1251.29	1247.38	1249.79	1246.71
15.950000	20.1	20.1	20.2	0.0	0.0	25.2	0.1	0.6	0.1	25.2	25.4
1980/ 1/ 1	1257.29	1257.29	1257.26	1247.38	1247.38	1251.27	1251.27	1251.27	1247.38	1249.78	1246.71
16.000000	20.0	20.0	20.1	0.0	0.0	25.1	0.1	0.6	0.1	25.1	25.3
1980/ 1/ 1	1257.29	1257.29	1257.25	1247.38	1247.38	1251.24	1251.24	1251.24	1247.38	1249.77	1246.71
16.049999	19.9	19.9	20.0	0.0	0.0	25.0	0.1	0.6	0.1	25.0	25.2
1980/ 1/ 1	1257.29	1257.29	1257.25	1247.38	1247.38	1251.22	1251.22	1251.22	1247.38	1249.75	1246.70
16.100000	19.8	19.8	19.9	0.0	0.0	24.9	0.1	0.6	0.1	24.9	25.0
1980/ 1/ 1	1257.28	1257.28	1257.25	1247.38	1247.38	1251.19	1251.19	1251.19	1247.38	1249.74	1246.70
16.150000	19.7	19.7	19.8	0.0	0.0	24.8	0.1	0.6	0.1	24.8	24.9
1980/ 1/ 1	1257.28	1257.28	1257.25	1247.38	1247.38	1251.17	1251.17	1251.17	1247.38	1249.73	1246.69
16.200001	19.6	19.6	19.7	0.0	0.0	24.7	0.1	0.6	0.1	24.7	24.8
1980/ 1/ 1	1257.28	1257.28	1257.25	1247.38	1247.38	1251.15	1251.15	1251.15	1247.38	1249.72	1246.69
16.250000	19.5	19.5	19.6	0.0	0.0	24.6	0.1	0.6	0.1	24.6	24.7
1980/ 1/ 1	1257.28	1257.28	1257.24	1247.38	1247.38	1251.12	1251.12	1251.12	1247.38	1249.71	1246.69
16.299999	19.4	19.4	19.5	0.0	0.0	24.5	0.1	0.6	0.1	24.5	24.6
1980/ 1/ 1	1257.28	1257.28	1257.24	1247.38	1247.38	1251.10	1251.10	1251.10	1247.38	1249.69	1246.68
16.350000	19.3	19.3	19.4	0.0	0.0	24.4	0.1	0.6	0.1	24.4	24.5
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.27	1257.27	1257.24	1247.38	1247.38	1251.08	1251.08	1251.08	1247.38	1249.68	1246.68
16.400000	19.2	19.2	19.3	0.0	0.0	24.3	0.1	0.6	0.1	24.3	24.4
1980/ 1/ 1	1257.27	1257.27	1257.24	1247.38	1247.38	1251.05	1251.05	1251.05	1247.38	1249.67	1246.68
16.450001	19.1	19.1	19.2	0.0	0.0	24.2	0.1	0.6	0.1	24.2	24.3
1980/ 1/ 1	1257.27	1257.27	1257.23	1247.38	1247.38	1251.03	1251.03	1251.03	1247.38	1249.66	1246.67
16.500000	19.0	19.0	19.1	0.0	0.0	24.1	0.1	0.6	0.1	24.1	24.2
1980/ 1/ 1	1257.27	1257.27	1257.23	1247.38	1247.38	1251.01	1251.01	1251.01	1247.38	1249.65	1246.67
16.549999	18.9	18.9	19.0	0.0	0.0	24.0	0.1	0.6	0.1	24.0	24.1
1980/ 1/ 1	1257.26	1257.26	1257.23	1247.38	1247.38	1250.98	1250.98	1250.98	1247.38	1249.64	1246.66
16.600000	18.8	18.8	18.9	0.0	0.0	23.9	0.1	0.6	0.1	23.9	24.0
1980/ 1/ 1	1257.26	1257.26	1257.22	1247.38	1247.38	1250.96	1250.96	1250.96	1247.38	1249.62	1246.66
16.650000	18.7	18.7	18.8	0.0	0.0	23.8	0.1	0.6	0.1	23.8	23.9
1980/ 1/ 1	1257.26	1257.26	1257.22	1247.38	1247.38	1250.94	1250.94	1250.94	1247.38	1249.61	1246.66
16.700001	18.6	18.6	18.7	0.0	0.0	23.7	0.1	0.6	0.1	23.7	23.8
1980/ 1/ 1	1257.25	1257.25	1257.22	1247.38	1247.38	1250.91	1250.91	1250.91	1247.38	1249.60	1246.65
16.750000	18.5	18.5	18.6	0.0	0.0	23.6	0.1	0.6	0.1	23.6	23.7
1980/ 1/ 1	1257.25	1257.25	1257.22	1247.38	1247.38	1250.89	1250.89	1250.89	1247.38	1249.59	1246.65
16.799999	18.4	18.4	18.5	0.0	0.0	23.5	0.1	0.6	0.1	23.5	23.6
1980/ 1/ 1	1257.25	1257.25	1257.21	1247.38	1247.38	1250.87	1250.87	1250.87	1247.38	1249.58	1246.64
16.850000	18.3	18.3	18.4	0.0	0.0	23.4	0.1	0.6	0.1	23.4	23.5
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.25	1257.25	1257.21	1247.38	1247.38	1250.85	1250.85	1250.85	1247.38	1249.57	1246.64
16.900000	18.2	18.2	18.3	0.0	0.0	23.3	0.1	0.6	0.1	23.3	23.4
1980/ 1/ 1	1257.24	1257.24	1257.21	1247.38	1247.38	1250.82	1250.82	1250.82	1247.38	1249.56	1246.64
16.950001	18.1	18.1	18.2	0.0	0.0	23.2	0.1	0.6	0.1	23.2	23.3
1980/ 1/ 1	1257.24	1257.24	1257.20	1247.38	1247.38	1250.80	1250.80	1250.80	1247.38	1249.54	1246.63
17.000000	18.0	18.0	18.1	0.0	0.0	23.1	0.1	0.6	0.1	23.1	23.2
1980/ 1/ 1	1257.24	1257.24	1257.20	1247.38	1247.38	1250.78	1250.78	1250.78	1247.38	1249.53	1246.63
17.049999	17.9	17.9	18.0	0.0	0.0	23.0	0.1	0.6	0.1	23.0	23.1
1980/ 1/ 1	1257.24	1257.24	1257.20	1247.38	1247.38	1250.76	1250.76	1250.76	1247.38	1249.52	1246.63
17.100000	17.8	17.8	17.9	0.0	0.0	22.9	0.1	0.6	0.1	22.9	23.0
1980/ 1/ 1	1257.23	1257.23	1257.19	1247.38	1247.38	1250.74	1250.74	1250.74	1247.38	1249.51	1246.62
17.150000	17.7	17.7	17.8	0.0	0.0	22.8	0.1	0.6	0.1	22.8	22.9
1980/ 1/ 1	1257.23	1257.23	1257.19	1247.38	1247.38	1250.71	1250.71	1250.71	1247.38	1249.50	1246.62
17.200001	17.6	17.6	17.7	0.0	0.0	22.7	0.1	0.6	0.1	22.7	22.8
1980/ 1/ 1	1257.23	1257.23	1257.19	1247.38	1247.38	1250.69	1250.69	1250.69	1247.38	1249.49	1246.61
17.250000	17.5	17.5	17.6	0.0	0.0	22.6	0.1	0.6	0.1	22.6	22.7
1980/ 1/ 1	1257.23	1257.23	1257.19	1247.38	1247.38	1250.67	1250.67	1250.67	1247.38	1249.47	1246.61
17.299999	17.4	17.4	17.5	0.0	0.0	22.5	0.1	0.6	0.1	22.5	22.6
1980/ 1/ 1	1257.22	1257.22	1257.18	1247.38	1247.38	1250.65	1250.65	1250.65	1247.38	1249.46	1246.61
17.350000	17.3	17.3	17.4	0.0	0.0	22.3	0.1	0.6	0.1	22.3	22.5
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.22	1257.22	1257.18	1247.38	1247.38	1250.63	1250.63	1250.63	1247.38	1249.45	1246.60
17.400000	17.2	17.2	17.3	0.0	0.0	22.2	0.1	0.6	0.1	22.2	22.3
1980/ 1/ 1	1257.22	1257.22	1257.18	1247.38	1247.38	1250.61	1250.61	1250.61	1247.38	1249.43	1246.60
17.450001	17.1	17.1	17.2	0.0	0.0	22.1	0.1	0.6	0.1	22.1	22.2
1980/ 1/ 1	1257.22	1257.22	1257.17	1247.38	1247.38	1250.59	1250.59	1250.59	1247.38	1249.41	1246.59
17.500000	17.0	17.0	17.1	0.0	0.0	21.9	0.1	0.6	0.1	21.9	22.1
1980/ 1/ 1	1257.21	1257.21	1257.17	1247.38	1247.38	1250.56	1250.56	1250.56	1247.38	1249.40	1246.58
17.549999	16.9	16.9	17.0	0.0	0.0	21.8	0.1	0.6	0.1	21.8	21.9
1980/ 1/ 1	1257.21	1257.21	1257.17	1247.38	1247.38	1250.54	1250.54	1250.54	1247.38	1249.38	1246.58
17.600000	16.8	16.8	16.9	0.0	0.0	21.6	0.1	0.6	0.1	21.6	21.8
1980/ 1/ 1	1257.21	1257.21	1257.17	1247.38	1247.38	1250.52	1250.52	1250.52	1247.38	1249.37	1246.57
17.650000	16.7	16.7	16.8	0.0	0.0	21.5	0.1	0.6	0.1	21.5	21.6
1980/ 1/ 1	1257.21	1257.21	1257.16	1247.38	1247.38	1250.50	1250.50	1250.50	1247.38	1249.35	1246.57
17.700001	16.6	16.6	16.7	0.0	0.0	21.3	0.1	0.6	0.1	21.3	21.5
1980/ 1/ 1	1257.20	1257.20	1257.16	1247.38	1247.38	1250.48	1250.48	1250.48	1247.38	1249.33	1246.56
17.750000	16.5	16.5	16.6	0.0	0.0	21.2	0.1	0.6	0.1	21.2	21.3
1980/ 1/ 1	1257.20	1257.20	1257.16	1247.38	1247.38	1250.46	1250.46	1250.46	1247.38	1249.32	1246.55
17.799999	16.4	16.4	16.5	0.0	0.0	21.0	0.1	0.6	0.1	21.0	21.1
1980/ 1/ 1	1257.20	1257.20	1257.15	1247.38	1247.38	1250.44	1250.44	1250.44	1247.38	1249.30	1246.55

17.850000	16.3	16.3	16.4	0.0	0.0	20.8	0.1	0.6	0.1	20.8	21.0
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1257.20	1257.20	1257.15	1247.38	1247.38	1250.42	1250.42	1250.42	1247.38	1249.28	1246.54
17.900000	16.2	16.2	16.3	0.0	0.0	20.7	0.1	0.5	0.1	20.7	20.8
1980/ 1/ 1	1257.19	1257.19	1257.15	1247.38	1247.38	1250.40	1250.40	1250.40	1247.38	1249.26	1246.53
17.950001	16.1	16.1	16.2	0.0	0.0	20.5	0.1	0.5	0.1	20.5	20.6
1980/ 1/ 1	1257.19	1257.19	1257.14	1247.38	1247.38	1250.38	1250.38	1250.38	1247.38	1249.25	1246.53
18.000000	16.0	16.0	16.1	0.0	0.0	20.3	0.1	0.5	0.1	20.3	20.4
1980/ 1/ 1	1257.19	1257.19	1257.14	1247.38	1247.38	1250.36	1250.36	1250.36	1247.38	1249.23	1246.52
18.049999	15.9	15.9	16.0	0.0	0.0	20.1	0.1	0.5	0.1	20.1	20.3
1980/ 1/ 1	1257.19	1257.19	1257.14	1247.38	1247.38	1250.34	1250.34	1250.34	1247.38	1249.21	1246.51
18.100000	15.8	15.8	15.9	0.0	0.0	19.9	0.1	0.5	0.1	19.9	20.1
1980/ 1/ 1	1257.18	1257.18	1257.14	1247.38	1247.38	1250.32	1250.32	1250.32	1247.38	1249.20	1246.51
18.150000	15.7	15.7	15.8	0.0	0.0	19.8	0.1	0.5	0.1	19.8	19.9
1980/ 1/ 1	1257.18	1257.18	1257.13	1247.38	1247.38	1250.31	1250.31	1250.31	1247.38	1249.18	1246.50
18.200001	15.6	15.6	15.7	0.0	0.0	19.6	0.1	0.5	0.1	19.6	19.7
1980/ 1/ 1	1257.18	1257.18	1257.13	1247.38	1247.38	1250.29	1250.29	1250.29	1247.38	1249.16	1246.49
18.250000	15.5	15.5	15.6	0.0	0.0	19.4	0.1	0.5	0.1	19.4	19.5
1980/ 1/ 1	1257.18	1257.18	1257.13	1247.38	1247.38	1250.27	1250.27	1250.27	1247.38	1249.15	1246.48
18.299999	15.4	15.4	15.5	0.0	0.0	19.2	0.1	0.5	0.1	19.2	19.3
1980/ 1/ 1	1257.17	1257.17	1257.12	1247.38	1247.38	1250.25	1250.25	1250.25	1247.38	1249.13	1246.48
18.350000	15.3	15.3	15.4	0.0	0.0	19.0	0.1	0.5	0.1	19.0	19.1
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1257.17	1257.17	1257.12	1247.38	1247.38	1250.23	1250.23	1250.23	1247.38	1249.11	1246.47
18.400000	15.2	15.2	15.3	0.0	0.0	18.8	0.1	0.5	0.1	18.8	18.9
1980/ 1/ 1	1257.17	1257.17	1257.12	1247.38	1247.38	1250.21	1250.21	1250.21	1247.38	1249.10	1246.46
18.450001	15.1	15.1	15.2	0.0	0.0	18.6	0.1	0.5	0.1	18.6	18.7
1980/ 1/ 1	1257.17	1257.17	1257.11	1247.38	1247.38	1250.20	1250.20	1250.20	1247.38	1249.09	1246.45
18.500000	15.0	15.0	15.1	0.0	0.0	18.4	0.1	0.5	0.1	18.4	18.6
1980/ 1/ 1	1257.16	1257.16	1257.11	1247.38	1247.38	1250.18	1250.18	1250.18	1247.38	1249.08	1246.44
18.549999	14.9	14.9	15.0	0.0	0.0	18.3	0.1	0.5	0.1	18.3	18.4
1980/ 1/ 1	1257.16	1257.16	1257.11	1247.38	1247.38	1250.16	1250.16	1250.16	1247.38	1249.07	1246.44
18.600000	14.8	14.8	14.9	0.0	0.0	18.1	0.1	0.5	0.1	18.1	18.2
1980/ 1/ 1	1257.16	1257.16	1257.11	1247.38	1247.38	1250.14	1250.14	1250.14	1247.38	1249.06	1246.43
18.650000	14.7	14.7	14.8	0.0	0.0	17.9	0.1	0.5	0.1	17.9	18.0
1980/ 1/ 1	1257.16	1257.16	1257.10	1247.38	1247.38	1250.13	1250.13	1250.13	1247.38	1249.04	1246.42
18.700001	14.6	14.6	14.7	0.0	0.0	17.7	0.1	0.5	0.1	17.7	17.8
1980/ 1/ 1	1257.15	1257.15	1257.10	1247.38	1247.38	1250.11	1250.11	1250.11	1247.38	1249.03	1246.41
18.750000	14.5	14.5	14.6	0.0	0.0	17.5	0.1	0.5	0.1	17.5	17.7
1980/ 1/ 1	1257.15	1257.15	1257.10	1247.38	1247.38	1250.09	1250.09	1250.09	1247.38	1249.02	1246.41
18.799999	14.4	14.4	14.5	0.0	0.0	17.4	0.1	0.5	0.1	17.4	17.5
1980/ 1/ 1	1257.15	1257.15	1257.09	1247.38	1247.38	1250.08	1250.08	1250.08	1247.38	1249.01	1246.40
18.850000	14.3	14.3	14.4	0.0	0.0	17.2	0.1	0.5	0.1	17.2	17.3
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1257.15	1257.15	1257.09	1247.38	1247.38	1250.06	1250.06	1250.06	1247.38	1249.00	1246.39
18.900000	14.2	14.2	14.3	0.0	0.0	17.0	0.1	0.5	0.1	17.0	17.2
1980/ 1/ 1	1257.14	1257.14	1257.09	1247.38	1247.38	1250.04	1250.04	1250.04	1247.38	1248.99	1246.39
18.950001	14.1	14.1	14.2	0.0	0.0	16.9	0.1	0.5	0.1	16.9	17.0
1980/ 1/ 1	1257.14	1257.14	1257.08	1247.38	1247.38	1250.03	1250.03	1250.03	1247.38	1248.98	1246.38
19.000000	14.0	14.0	14.1	0.0	0.0	16.7	0.1	0.4	0.1	16.7	16.8
1980/ 1/ 1	1257.14	1257.14	1257.08	1247.38	1247.38	1250.01	1250.01	1250.01	1247.38	1248.97	1246.37
19.049999	14.0	14.0	14.0	0.0	0.0	16.5	0.1	0.4	0.1	16.5	16.6
1980/ 1/ 1	1257.14	1257.14	1257.08	1247.38	1247.38	1250.00	1250.00	1250.00	1247.38	1248.96	1246.36
19.100000	13.9	13.9	13.9	0.0	0.0	16.3	0.1	0.4	0.1	16.3	16.5
1980/ 1/ 1	1257.14	1257.14	1257.08	1247.38	1247.38	1249.98	1249.98	1249.98	1247.38	1248.94	1246.35
19.150000	13.9	13.9	13.9	0.0	0.0	16.1	0.1	0.6	0.1	16.1	16.3
1980/ 1/ 1	1257.14	1257.14	1257.08	1247.38	1247.38	1249.96	1249.96	1249.96	1247.38	1248.93	1246.35
19.200001	13.8	13.8	13.8	0.0	0.0	15.9	0.1	0.5	0.1	15.9	16.1
1980/ 1/ 1	1257.14	1257.14	1257.08	1247.38	1247.38	1249.94	1249.94	1249.94	1247.38	1248.92	1246.34
19.250000	13.8	13.8	13.8	0.0	0.0	15.7	0.1	0.5	0.1	15.7	15.9
1980/ 1/ 1	1257.13	1257.13	1257.07	1247.38	1247.38	1249.92	1249.92	1249.92	1247.38	1248.91	1246.33
19.299999	13.7	13.7	13.7	0.0	0.0	15.6	0.1	0.5	0.1	15.6	15.7
1980/ 1/ 1	1257.13	1257.13	1257.07	1247.38	1247.38	1249.90	1249.90	1249.90	1247.38	1248.90	1246.32
19.350000	13.7	13.7	13.7	0.0	0.0	15.4	0.1	0.5	0.1	15.4	15.5
	U/S	D/S	HEAD	WEIR	BASIN	BASIN	U/S	D/S	BAS2A	BAS2B	RETURN
	WEIR	WEIR	WALL	FLOW	2A	2B	60-IN	60-IN	36-INCH	24-INCH	48-INCH
1980/ 1/ 1	1257.13	1257.13	1257.07	1247.38	1247.38	1249.88	1249.88	1249.88	1247.38	1248.88	1246.31
19.400000	13.6	13.6	13.6	0.0	0.0	15.2	0.1	0.5	0.1	15.2	15.3
1980/ 1/ 1	1257.13	1257.13	1257.07	1247.38	1247.38	1249.86	1249.86	1249.86	1247.38	1248.87	1246.30
19.450001	13.6	13.6	13.6	0.0	0.0	15.0	0.1	0.5	0.1	15.0	15.1
1980/ 1/ 1	1257.13	1257.13	1257.07	1247.38	1247.38	1249.85	1249.85	1249.85	1247.38	1248.86	1246.29
19.500000	13.5	13.5	13.5	0.0	0.0	14.8	0.1	0.5	0.1	14.8	14.9
1980/ 1/ 1	1257.13	1257.13	1257.07	1247.38	1247.38	1249.83	1249.83	1249.83	1247.38	1248.85	1246.28
19.549999	13.5	13.5	13.5	0.0	0.0	14.6	0.1	0.5	0.1	14.6	14.7
1980/ 1/ 1	1257.13	1257.13	1257.07	1247.38	1247.38	1249.81	1249.81	1249.81	1247.38	1248.84	1246.27
19.600000	13.4	13.4	13.4	0.0	0.0	14.4	0.1	0.5	0.1	14.4	14.5
1980/ 1/ 1	1257.13	1257.13	1257.06	1247.38	1247.38	1249.80	1249.80	1249.79	1247.38	1248.82	1246.27
19.650000	13.4	13.4	13.4	0.0	0.0	14.2	0.1	0.5	0.1	14.2	14.4
1980/ 1/ 1	1257.12	1257.12	1257.06	1247.38	1247.38	1249.78	1249.78	1249.78	1247.38	1248.81	1246.26
19.700001	13.3	13.3	13.3	0.0	0.0	14.0	0.1	0.4	0.1	14.0	14.2
1980/ 1/ 1	1257.12	1257.12	1257.06	1247.38	1247.38	1249.76	1249.76	1249.76	1247.38	1248.80	1246.25

19.750000	13.3	13.3	13.3	0.0	0.0	13.9	0.1	0.4	0.1	13.9	14.0
1980/ 1/ 1	1257.12	1257.12	1257.06	1247.38	1247.38	1249.74	1249.74	1249.74	1247.38	1248.79	1246.24
19.799999	13.2	13.2	13.2	0.0	0.0	13.7	0.1	0.4	0.1	13.7	13.8
1980/ 1/ 1	1257.12	1257.12	1257.06	1247.38	1247.38	1249.73	1249.73	1249.73	1247.38	1248.78	1246.23
19.850000	13.2	13.2	13.2	0.0	0.0	13.5	0.1	0.4	0.1	13.5	13.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.12	1257.12	1257.06	1247.38	1247.38	1249.71	1249.71	1249.71	1247.38	1248.77	1246.23
19.900000	13.1	13.1	13.1	0.0	0.0	13.4	0.1	0.4	0.1	13.4	13.5
1980/ 1/ 1	1257.12	1257.12	1257.06	1247.38	1247.38	1249.70	1249.70	1249.70	1247.38	1248.76	1246.22
19.950001	13.1	13.1	13.1	0.0	0.0	13.2	0.1	0.4	0.1	13.2	13.3
1980/ 1/ 1	1257.12	1257.12	1257.05	1247.38	1247.38	1249.68	1249.68	1249.68	1247.38	1248.75	1246.21
20.000000	13.0	13.0	13.0	0.0	0.0	13.0	0.1	0.4	0.1	13.0	13.2
1980/ 1/ 1	1257.12	1257.12	1257.05	1247.38	1247.38	1249.67	1249.67	1249.67	1247.38	1248.74	1246.20
20.049999	13.0	13.0	13.0	0.0	0.0	12.9	0.1	0.4	0.1	12.9	13.0
1980/ 1/ 1	1257.12	1257.12	1257.05	1247.38	1247.38	1249.65	1249.65	1249.65	1247.38	1248.73	1246.19
20.100000	12.9	12.9	12.9	0.0	0.0	12.7	0.1	0.4	0.1	12.7	12.8
1980/ 1/ 1	1257.11	1257.11	1257.05	1247.38	1247.38	1249.63	1249.63	1249.63	1247.38	1248.72	1246.19
20.150000	12.9	12.9	12.9	0.0	0.0	12.6	0.1	0.4	0.1	12.6	12.7
1980/ 1/ 1	1257.11	1257.11	1257.05	1247.38	1247.38	1249.62	1249.62	1249.62	1247.38	1248.71	1246.18
20.200001	12.8	12.8	12.8	0.0	0.0	12.4	0.1	0.4	0.1	12.4	12.5
1980/ 1/ 1	1257.11	1257.11	1257.05	1247.38	1247.38	1249.60	1249.60	1249.60	1247.38	1248.70	1246.17
20.250000	12.8	12.8	12.8	0.0	0.0	12.3	0.1	0.4	0.1	12.3	12.4
1980/ 1/ 1	1257.11	1257.11	1257.04	1247.38	1247.38	1249.59	1249.59	1249.59	1247.38	1248.69	1246.16
20.299999	12.7	12.7	12.7	0.0	0.0	12.1	0.1	0.4	0.1	12.1	12.2
1980/ 1/ 1	1257.11	1257.11	1257.04	1247.38	1247.38	1249.58	1249.58	1249.58	1247.38	1248.68	1246.16
20.350000	12.7	12.7	12.7	0.0	0.0	12.0	0.1	0.4	0.1	12.0	12.1
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.11	1257.11	1257.04	1247.38	1247.38	1249.56	1249.56	1249.56	1247.38	1248.67	1246.15
20.400000	12.6	12.6	12.6	0.0	0.0	11.8	0.1	0.4	0.1	11.8	11.9
1980/ 1/ 1	1257.11	1257.11	1257.04	1247.38	1247.38	1249.55	1249.55	1249.55	1247.38	1248.67	1246.14
20.450001	12.6	12.6	12.6	0.0	0.0	11.7	0.1	0.4	0.1	11.7	11.8
1980/ 1/ 1	1257.11	1257.11	1257.04	1247.38	1247.38	1249.53	1249.53	1249.53	1247.38	1248.66	1246.13
20.500000	12.5	12.5	12.5	0.0	0.0	11.5	0.1	0.4	0.1	11.5	11.6
1980/ 1/ 1	1257.11	1257.11	1257.04	1247.38	1247.38	1249.52	1249.52	1249.52	1247.38	1248.65	1246.13
20.549999	12.5	12.5	12.5	0.0	0.0	11.4	0.1	0.4	0.1	11.4	11.5
1980/ 1/ 1	1257.10	1257.10	1257.04	1247.38	1247.38	1249.51	1249.51	1249.51	1247.38	1248.64	1246.12
20.600000	12.4	12.4	12.4	0.0	0.0	11.2	0.1	0.4	0.1	11.2	11.4
1980/ 1/ 1	1257.10	1257.10	1257.03	1247.38	1247.38	1249.49	1249.49	1249.49	1247.38	1248.63	1246.11
20.650000	12.4	12.4	12.4	0.0	0.0	11.1	0.1	0.4	0.1	11.1	11.2
1980/ 1/ 1	1257.10	1257.10	1257.03	1247.38	1247.38	1249.48	1249.48	1249.48	1247.38	1248.62	1246.10
20.700001	12.3	12.3	12.3	0.0	0.0	11.0	0.1	0.4	0.1	11.0	11.1
1980/ 1/ 1	1257.10	1257.10	1257.03	1247.38	1247.38	1249.47	1249.47	1249.47	1247.38	1248.61	1246.10
20.750000	12.3	12.3	12.3	0.0	0.0	10.9	0.1	0.3	0.1	10.9	11.0
1980/ 1/ 1	1257.10	1257.10	1257.03	1247.38	1247.38	1249.45	1249.45	1249.45	1247.38	1248.61	1246.09
20.799999	12.2	12.2	12.2	0.0	0.0	10.7	0.1	0.4	0.1	10.7	10.8
1980/ 1/ 1	1257.10	1257.10	1257.03	1247.38	1247.38	1249.44	1249.44	1249.44	1247.38	1248.60	1246.08
20.850000	12.2	12.2	12.2	0.0	0.0	10.6	0.1	0.3	0.1	10.6	10.7
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.10	1257.10	1257.03	1247.38	1247.38	1249.43	1249.43	1249.43	1247.38	1248.59	1246.08
20.900000	12.1	12.1	12.1	0.0	0.0	10.5	0.1	0.3	0.1	10.5	10.6
1980/ 1/ 1	1257.10	1257.10	1257.02	1247.38	1247.38	1249.42	1249.42	1249.42	1247.38	1248.58	1246.07
20.950001	12.1	12.1	12.1	0.0	0.0	10.4	0.1	0.3	0.1	10.4	10.5
1980/ 1/ 1	1257.09	1257.09	1257.02	1247.38	1247.38	1249.40	1249.40	1249.40	1247.38	1248.58	1246.06
21.000000	12.0	12.0	12.0	0.0	0.0	10.2	0.1	0.3	0.1	10.2	10.4
1980/ 1/ 1	1257.09	1257.09	1257.02	1247.38	1247.38	1249.39	1249.39	1249.39	1247.38	1248.57	1246.06
21.049999	12.0	12.0	12.0	0.0	0.0	10.1	0.1	0.3	0.1	10.1	10.2
1980/ 1/ 1	1257.09	1257.09	1257.02	1247.38	1247.38	1249.38	1249.38	1249.38	1247.38	1248.56	1246.05
21.100000	11.9	11.9	11.9	0.0	0.0	10.0	0.1	0.3	0.1	10.0	10.1
1980/ 1/ 1	1257.09	1257.09	1257.02	1247.38	1247.38	1249.37	1249.37	1249.37	1247.38	1248.55	1246.04
21.150000	11.9	11.9	11.9	0.0	0.0	9.9	0.1	0.3	0.1	9.9	10.0
1980/ 1/ 1	1257.09	1257.09	1257.02	1247.38	1247.38	1249.36	1249.36	1249.36	1247.38	1248.55	1246.04
21.200001	11.8	11.8	11.8	0.0	0.0	9.8	0.1	0.3	0.1	9.8	9.9
1980/ 1/ 1	1257.09	1257.09	1257.02	1247.38	1247.38	1249.34	1249.34	1249.34	1247.38	1248.54	1246.03
21.250000	11.8	11.8	11.8	0.0	0.0	9.7	0.1	0.3	0.1	9.7	9.8
1980/ 1/ 1	1257.09	1257.09	1257.01	1247.38	1247.38	1249.33	1249.33	1249.33	1247.38	1248.53	1246.02
21.299999	11.7	11.7	11.7	0.0	0.0	9.6	0.1	0.3	0.1	9.6	9.7
1980/ 1/ 1	1257.09	1257.09	1257.01	1247.38	1247.38	1249.32	1249.32	1249.32	1247.38	1248.52	1246.02
21.350000	11.7	11.7	11.7	0.0	0.0	9.4	0.1	0.3	0.1	9.4	9.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.09	1257.09	1257.01	1247.38	1247.38	1249.31	1249.31	1249.31	1247.38	1248.52	1246.01
21.400000	11.6	11.6	11.6	0.0	0.0	9.3	0.1	0.3	0.1	9.3	9.4
1980/ 1/ 1	1257.08	1257.08	1257.01	1247.38	1247.38	1249.30	1249.30	1249.30	1247.38	1248.51	1246.01
21.450001	11.6	11.6	11.6	0.0	0.0	9.2	0.1	0.3	0.1	9.2	9.3
1980/ 1/ 1	1257.08	1257.08	1257.01	1247.38	1247.38	1249.29	1249.29	1249.29	1247.38	1248.50	1246.00
21.500000	11.5	11.5	11.5	0.0	0.0	9.1	0.1	0.3	0.1	9.1	9.2
1980/ 1/ 1	1257.08	1257.08	1257.01	1247.38	1247.38	1249.28	1249.28	1249.28	1247.38	1248.50	1245.99
21.549999	11.5	11.5	11.5	0.0	0.0	9.0	0.1	0.3	0.1	9.0	9.1
1980/ 1/ 1	1257.08	1257.08	1257.01	1247.38	1247.38	1249.27	1249.27	1249.27	1247.38	1248.49	1245.99
21.600000	11.4	11.4	11.4	0.0	0.0	8.9	0.1	0.3	0.1	8.9	9.0
1980/ 1/ 1	1257.08	1257.08	1257.00	1247.38	1247.38	1249.26	1249.26	1249.26	1247.38	1248.48	1245.98

21.650000	11.4	11.4	11.4	0.0	0.0	8.8	0.1	0.3	0.1	8.8	8.9
1980/ 1/ 1	1257.08	1257.08	1257.00	1247.38	1247.38	1249.24	1249.24	1249.24	1247.38	1248.48	1245.98
21.700001	11.3	11.3	11.3	0.0	0.0	8.7	0.1	0.3	0.1	8.7	8.8
1980/ 1/ 1	1257.08	1257.08	1257.00	1247.38	1247.38	1249.23	1249.23	1249.23	1247.38	1248.47	1245.97
21.750000	11.3	11.3	11.3	0.0	0.0	8.6	0.1	0.3	0.1	8.6	8.7
1980/ 1/ 1	1257.08	1257.08	1257.00	1247.38	1247.38	1249.22	1249.22	1249.22	1247.38	1248.46	1245.96
21.799999	11.2	11.2	11.2	0.0	0.0	8.5	0.1	0.3	0.1	8.5	8.6
1980/ 1/ 1	1257.08	1257.08	1257.00	1247.38	1247.38	1249.21	1249.21	1249.21	1247.38	1248.46	1245.96
21.850000	11.2	11.2	11.2	0.0	0.0	8.4	0.1	0.3	0.1	8.4	8.6
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.08	1257.08	1257.00	1247.38	1247.38	1249.20	1249.20	1249.20	1247.38	1248.45	1245.95
21.900000	11.1	11.1	11.1	0.0	0.0	8.4	0.1	0.3	0.1	8.4	8.5
1980/ 1/ 1	1257.07	1257.07	1256.99	1247.38	1247.38	1249.19	1249.19	1249.19	1247.38	1248.45	1245.95
21.950001	11.1	11.1	11.1	0.0	0.0	8.3	0.1	0.3	0.1	8.3	8.4
1980/ 1/ 1	1257.07	1257.07	1256.99	1247.38	1247.38	1249.18	1249.18	1249.18	1247.38	1248.44	1245.94
22.000000	11.0	11.0	11.0	0.0	0.0	8.2	0.1	0.3	0.1	8.2	8.3
1980/ 1/ 1	1257.07	1257.07	1256.99	1247.38	1247.38	1249.17	1249.17	1249.17	1247.38	1248.43	1245.94
22.049999	11.0	11.0	11.0	0.0	0.0	8.1	0.1	0.3	0.1	8.1	8.2
1980/ 1/ 1	1257.07	1257.07	1256.99	1247.38	1247.38	1249.16	1249.17	1249.16	1247.38	1248.43	1245.93
22.100000	10.9	10.9	10.9	0.0	0.0	8.0	0.1	0.3	0.1	8.0	8.1
1980/ 1/ 1	1257.07	1257.07	1256.99	1247.38	1247.38	1249.16	1249.16	1249.16	1247.38	1248.42	1245.93
22.150000	10.9	10.9	10.9	0.0	0.0	7.9	0.1	0.3	0.1	7.9	8.0
1980/ 1/ 1	1257.07	1257.07	1256.99	1247.38	1247.38	1249.15	1249.15	1249.15	1247.38	1248.42	1245.92
22.200001	10.8	10.8	10.8	0.0	0.0	7.8	0.1	0.3	0.1	7.8	7.9
1980/ 1/ 1	1257.07	1257.07	1256.99	1247.38	1247.38	1249.14	1249.14	1249.14	1247.38	1248.41	1245.92
22.250000	10.8	10.8	10.8	0.0	0.0	7.8	0.1	0.3	0.1	7.8	7.9
1980/ 1/ 1	1257.07	1257.07	1256.98	1247.38	1247.38	1249.13	1249.13	1249.13	1247.38	1248.41	1245.91
22.299999	10.7	10.7	10.7	0.0	0.0	7.7	0.1	0.3	0.1	7.7	7.8
1980/ 1/ 1	1257.07	1257.07	1256.98	1247.38	1247.38	1249.12	1249.12	1249.12	1247.38	1248.40	1245.91
22.350000	10.7	10.7	10.7	0.0	0.0	7.6	0.1	0.3	0.1	7.6	7.7
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.06	1257.06	1256.98	1247.38	1247.38	1249.11	1249.11	1249.11	1247.38	1248.40	1245.90
22.400000	10.6	10.6	10.6	0.0	0.0	7.5	0.1	0.3	0.1	7.5	7.6
1980/ 1/ 1	1257.06	1257.06	1256.98	1247.38	1247.38	1249.10	1249.10	1249.10	1247.38	1248.39	1245.90
22.450001	10.6	10.6	10.6	0.0	0.0	7.4	0.1	0.3	0.1	7.4	7.5
1980/ 1/ 1	1257.06	1257.06	1256.98	1247.38	1247.38	1249.09	1249.09	1249.09	1247.38	1248.39	1245.89
22.500000	10.5	10.5	10.5	0.0	0.0	7.4	0.1	0.2	0.1	7.4	7.5
1980/ 1/ 1	1257.06	1257.06	1256.98	1247.38	1247.38	1249.08	1249.08	1249.08	1247.38	1248.38	1245.89
22.549999	10.5	10.5	10.5	0.0	0.0	7.3	0.1	0.2	0.1	7.3	7.4
1980/ 1/ 1	1257.06	1257.06	1256.97	1247.38	1247.38	1249.07	1249.07	1249.07	1247.38	1248.37	1245.88
22.600000	10.4	10.4	10.4	0.0	0.0	7.2	0.1	0.2	0.1	7.2	7.3
1980/ 1/ 1	1257.06	1257.06	1256.97	1247.38	1247.38	1249.07	1249.07	1249.07	1247.38	1248.37	1245.88
22.650000	10.4	10.4	10.4	0.0	0.0	7.1	0.1	0.2	0.1	7.1	7.2
1980/ 1/ 1	1257.06	1257.06	1256.97	1247.38	1247.38	1249.06	1249.06	1249.06	1247.38	1248.36	1245.87
22.700001	10.3	10.3	10.3	0.0	0.0	7.1	0.1	0.2	0.1	7.1	7.2
1980/ 1/ 1	1257.06	1257.06	1256.97	1247.38	1247.38	1249.05	1249.05	1249.05	1247.38	1248.36	1245.87
22.750000	10.3	10.3	10.3	0.0	0.0	7.0	0.1	0.2	0.1	7.0	7.1
1980/ 1/ 1	1257.06	1257.06	1256.97	1247.38	1247.38	1249.04	1249.04	1249.04	1247.38	1248.35	1245.86
22.799999	10.2	10.2	10.2	0.0	0.0	6.9	0.1	0.2	0.1	6.9	7.0
1980/ 1/ 1	1257.05	1257.05	1256.97	1247.38	1247.38	1249.03	1249.03	1249.03	1247.38	1248.35	1245.86
22.850000	10.2	10.2	10.2	0.0	0.0	6.9	0.1	0.2	0.1	6.9	7.0
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.05	1257.05	1256.97	1247.38	1247.38	1249.02	1249.02	1249.02	1247.38	1248.34	1245.85
22.900000	10.1	10.1	10.1	0.0	0.0	6.8	0.1	0.2	0.1	6.8	6.9
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1249.02	1249.02	1249.02	1247.38	1248.34	1245.85
22.950001	10.1	10.1	10.1	0.0	0.0	6.7	0.1	0.2	0.1	6.7	6.8
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1249.01	1249.01	1249.01	1247.38	1248.33	1245.84
23.000000	10.0	10.0	10.0	0.0	0.0	6.7	0.1	0.2	0.1	6.7	6.8
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1249.00	1249.00	1249.00	1247.38	1248.33	1245.84
23.049999	10.0	10.0	10.0	0.0	0.0	6.6	0.1	0.2	0.1	6.6	6.7
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.99	1248.99	1248.99	1247.38	1248.33	1245.83
23.100000	10.0	10.0	10.0	0.0	0.0	6.5	0.1	0.2	0.1	6.5	6.6
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.98	1248.98	1248.98	1247.38	1248.32	1245.83
23.150000	10.0	10.0	10.0	0.0	0.0	6.5	0.1	0.2	0.1	6.5	6.6
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.98	1248.98	1248.98	1247.38	1248.32	1245.83
23.200001	10.0	10.0	10.0	0.0	0.0	6.4	0.1	0.2	0.1	6.4	6.5
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.97	1248.97	1248.97	1247.38	1248.31	1245.82
23.250000	10.0	10.0	10.0	0.0	0.0	6.3	0.1	0.2	0.1	6.3	6.4
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.96	1248.96	1248.96	1247.38	1248.31	1245.82
23.299999	10.0	10.0	10.0	0.0	0.0	6.3	0.1	0.2	0.1	6.3	6.4
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.95	1248.95	1248.95	1247.38	1248.30	1245.81
23.350000	10.0	10.0	10.0	0.0	0.0	6.2	0.1	0.2	0.1	6.2	6.3
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.95	1248.95	1248.95	1247.38	1248.30	1245.81
23.400000	10.0	10.0	10.0	0.0	0.0	6.2	0.1	0.2	0.1	6.2	6.3
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.94	1248.94	1248.94	1247.38	1248.30	1245.80
23.450001	10.0	10.0	10.0	0.0	0.0	6.1	0.1	0.2	0.1	6.1	6.2
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.93	1248.93	1248.93	1247.38	1248.29	1245.80
23.500000	10.0	10.0	10.0	0.0	0.0	6.0	0.1	0.2	0.1	6.0	6.1
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.92	1248.92	1248.92	1247.38	1248.29	1245.80

23.549999	10.0	10.0	10.0	0.0	0.0	6.0	0.1	0.2	0.1	6.0	6.1
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.92	1248.92	1248.92	1247.38	1248.28	1245.79
23.600000	10.0	10.0	10.0	0.0	0.0	5.9	0.1	0.2	0.1	5.9	6.0
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.91	1248.91	1248.91	1247.38	1248.28	1245.79
23.650000	10.0	10.0	10.0	0.0	0.0	5.9	0.1	0.2	0.1	5.9	6.0
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.90	1248.90	1248.90	1247.38	1248.28	1245.78
23.700001	10.0	10.0	10.0	0.0	0.0	5.8	0.1	0.2	0.1	5.8	5.9
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.90	1248.90	1248.90	1247.38	1248.27	1245.78
23.750000	10.0	10.0	10.0	0.0	0.0	5.8	0.1	0.2	0.1	5.8	5.9
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.89	1248.89	1248.89	1247.38	1248.27	1245.78
23.799999	10.0	10.0	10.0	0.0	0.0	5.7	0.1	0.2	0.1	5.7	5.8
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.88	1248.88	1248.88	1247.38	1248.26	1245.77
23.850000	10.0	10.0	10.0	0.0	0.0	5.7	0.1	0.2	0.1	5.7	5.8
	U/S WEIR	D/S WEIR	HEAD WALL	WEIR FLOW	BASIN 2A	BASIN 2B	U/S 60-IN	D/S 60-IN	BAS2A 36-INCH	BAS2B 24-INCH	RETURN 48-INCH
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.88	1248.88	1248.88	1247.38	1248.26	1245.77
23.900000	10.0	10.0	10.0	0.0	0.0	5.6	0.1	0.2	0.1	5.6	5.7
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.87	1248.87	1248.87	1247.38	1248.26	1245.76
23.950001	10.0	10.0	10.0	0.0	0.0	5.6	0.1	0.2	0.1	5.6	5.7
1980/ 1/ 1	1257.05	1257.05	1256.96	1247.38	1247.38	1248.86	1248.86	1248.86	1247.38	1248.25	1245.76
24.000000	10.0	10.0	10.0	0.0	0.0	5.5	0.1	0.2	0.1	5.5	5.6

APPENDIX B

VERIFICATION OF MODEL RESULTS

	Initial (s)	Date
Measured in place by:		
Calculated by:	DWB	9-19-95
Checked by:	EDL	9/19/95

EXHIBIT B-1

BASIN 2A SIDE FLOW WEIR CALCULATIONS
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Q = CwLd^1.5 Weir Crest Elevation = 1260.30

weir coefficient (Cw) = 2.60
length (L) = 142 feet
depth (d) = varies

Upstream Flow (cfs)	Average Flow Elevation in Channel (feet - NGVD)	Depth on Weir (feet)	Computed Weir Flow (cfs)	FEQ Weir Flow Results (cfs)
292	1260.48	0.18	28	32
318	1260.55	0.24	45	51
345	1260.61	0.31	64	71
635	1261.12	0.81	272	298
858	1261.41	1.11	432	479
1212	1261.83	1.53	699	764

	Initial (s)	Date
Measured in place by:		
Calculated by:	DMB	9-19-95
Checked by:	EDL	9/19

EXHIBIT B-2

BASIN 2A DROP INLET RATING CURVE COMPUTATIONS
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Grate Size: 18 feet x 16 feet

Free Flow Equation: Q = CVA
orifice coefficient (C) = 0.6
average velocity (V) = 67% of (2gh*)^0.5
g = 32.2 feet/sec./sec.
average head difference (h*) = varies
area (A) = Grate Area less 33% Bar Cover

Submerged Flow Equation: Q = CA(2gh)^0.5
orifice coefficient (C) = 0.6
area (A) = Grate Area less 33% Bar Cover
g = 32.2 feet/sec./sec.
head difference (h) = varies

Water Surface Elevation of Basin 2A	Water Surface Elevation Downstream of Grate (U/S 60")	H1 (feet)	H2 (feet)	Average Velocity (fps)	Area (sq. ft.)	Free Flow (cfs)	Submerged Flow (cfs)	FEQ Flow Results (cfs)
1256.00	-	-	0.00	0.0	0	0	-	0
1256.52	1250.01	-	0.52	3.9	25	58	-	58
1257.02	1251.21	-	1.02	5.4	49	159	-	161
1258.03	1255.67	-	2.03	7.6	98	448	-	448
1259.02	1257.65	-	3.02	9.3	146	812	-	541
1260.37	1259.45	0.37	4.37	11.9	193	-	891	618
1261.12	1260.27	1.12	5.12	13.9	193	-	857	651
1263.10	1262.23	3.10	7.10	18.0	193	-	867	699

	Initial (s)	Date
Measured in place by:		
Calculated by:	DMB	9-19-95
Checked by:	EDL	9-19-95

EXHIBIT B-3

TWIN 60-INCH LOSSES
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Head Loss Equation: H(total) = H(friction) + H(bends)

Friction Loss Equation: H(friction) = S * L
friction slope (S) = (n^2)(Q^2)/{(Cn^2)(A^2)[R^(4/3)]}
Manning n = 0.013
flow per pipe (Q) = varies
Cn = 1.49
diameter = 5.0 feet
hydraulic radius = d/4 = 1.25 feet
area (A) = 19.63 square feet
length (L) = 408 feet

Bend Loss Equation: H(bends) = Kb(V^2/2g)
Kb = 0.504
velocity (V) = Q/A
g = 32.2 feet/sec./sec.

Flow (cfs)	Flow per Pipe (cfs)	Time	FEQ Water surface Elevation Basin 2A (feet-NGVD)	FEQ Water surface Elevation Upstream 60-inch (feet-NGVD)	FEQ Water surface Elevation Downstream 60-inch (feet-NGVD)	FEQ Water surface Elevation Basin 2B (feet-NGVD)	Computed Head Loss (feet)	FEQ Head Loss (feet)
541	271	04:02	1259.02	1257.65	1252.57	1249.14	5.88	5.08
716	358	04:21	1262.95	1262.04	1253.15	1253.15	10.30	8.89
352	176	04:57	1260.58	1260.26	1258.11	1258.11	2.49	2.15
-8	-4	05:15	1258.61	1258.62	1258.62	1258.62	0.00	0.00

EXHIBIT B-4
BYPASS CBC CAPACITY
(FROM HEADWALL TO OUTLET)

STORM DRAIN ANALYSIS PLUS

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Version
Serial Number

Sep 13, 1995 20:42:23

Input file : tenchan.dat
Output file: tenchan.out

INPUT FILE LISTING

```
T1 TENTH STREET WASH     FILE NAME: TOWNDIP
T2 ALTERNATIVE C1A FLOW ANALYSIS
T3 FROM BYPASS FLOW CULVERT TO UPSTREAM OF TOWNLEY, NO BOX UNDER TOWNLEY
SO    791.00  56.65  1                          63.69
R     933.00  56.93  1      .016
TS    933.00  56.93  2      .040
R     963.00  57.00  2      .040
TS    983.00  62.00  3      .025
R    1033.00  63.00  3      .025
TS   1053.00  62.00  4      .030
R    1083.00  62.50  4      .030
SH                   4
                                                    SP
                                WATER SURFACE PROFILE - CHANNEL DEFINITION LISTING                          PAGE    1
 CARD  SECT  CHN   NO OF  AVE PIER  HEIGHT 1  BASE   ZL    ZR   INV   Y(1)  Y(2)  Y(3)  Y(4)  Y(5)  Y(6)  Y(7)  Y(8)  Y(9)  Y(10)
 CODE   NO   TYPE  PIERS   WIDTH    DIAMETER  WIDTH              DROP

 CD      1    1     0       .00      7.00    30.00   1.00  1.00   .00
 CD      2    1     0       .00      7.00    30.00   1.00  1.00   .00
 CD      3    1     0       .00      3.00    15.00  20.00 20.00   .00
 CD      4    1     0       .00     10.00     5.00   3.00  2.00   .00
                                                                                                          PAGE NO    1

                          WATER SURFACE PROFILE - TITLE CARD LISTING
HEADING LINE NO 1 IS -
                            TENTH STREET WASH     FILE NAME: TOWNDIP
HEADING LINE NO 2 IS -
                            ALTERNATIVE C1A FLOW ANALYSIS
HEADING LINE NO 3 IS -
                            FROM BYPASS FLOW CULVERT TO UPSTREAM OF TOWNLEY, NO BOX UNDER TOWNLEY
                                                                                                          PAGE NO    2

                          WATER SURFACE PROFILE - ELEMENT CARD LISTING
0 ELEMENT NO   1 IS A SYSTEM OUTLET     *         *     *
                     U/S DATA   STATION    INVERT  SECT                                   W S ELEV
                                 791.00   56.65    1                                       63.69
  ELEMENT NO   2 IS A REACH             *         *     *
                     U/S DATA   STATION    INVERT  SECT              N                RADIUS  ANGLE  ANG PT  MAN H
                                 933.00   56.93    1              .016                    .00    .00     .00      0
  ELEMENT NO   3 IS A TRANSITION        *         *     *
                     U/S DATA   STATION    INVERT  SECT              N
                                 933.00   56.93    2              .040
THE ABOVE ELEMENT CONTAINED AN INVERT ELEV WHICH WAS NOT GREATER THAN THE PREVIOUS INVERT ELEV -WARNING
  ELEMENT NO   4 IS A REACH             *         *     *
                     U/S DATA   STATION    INVERT  SECT              N                RADIUS  ANGLE  ANG PT  MAN H
                                 963.00   57.00    2              .040                    .00    .00     .00      0
  ELEMENT NO   5 IS A TRANSITION        *         *     *
                     U/S DATA   STATION    INVERT  SECT              N
                                 983.00   62.00    3              .025
  ELEMENT NO   6 IS A REACH             *         *     *
```

```
                    U/S DATA   STATION    INVERT  SECT              N                                RADIUS  ANGLE  ANG PT  MAN H
                               1033.00    63.00    3              .025                                  .00    .00     .00      0
 ELEMENT NO   7 IS A TRANSITION          *         *     *
                    U/S DATA   STATION    INVERT  SECT              N
                               1053.00    62.00    4              .030
THE ABOVE ELEMENT CONTAINED AN INVERT ELEV WHICH WAS NOT GREATER THAN THE PREVIOUS INVERT ELEV -WARNING
 ELEMENT NO   8 IS A REACH               *         *     *
                    U/S DATA   STATION    INVERT  SECT              N                                RADIUS  ANGLE  ANG PT  MAN H
                               1083.00    62.50    4              .030                                  .00    .00     .00      0
 ELEMENT NO   9 IS A SYSTEM HEADWORKS                  *                    *
                    U/S DATA   STATION    INVERT  SECT                                     W S ELEV
                               1083.00    62.50    4                                          .00
NO EDIT ERRORS ENCOUNTERED-COMPUTATION IS NOW BEGINNING

** WARNING NO. 2 ** - WATER SURFACE ELEVATION GIVEN IS LESS THAN OR EQUALS INVERT ELEVATION IN HDWKDS, W.S.ELEV = INV + DC
                                                                                                                          PAGE    1
                                          WATER SURFACE PROFILE LISTING
                        TENTH STREET WASH     FILE NAME: TOWNDIP
                        ALTERNATIVE C1A FLOW ANALYSIS
                        FROM BYPASS FLOW CULVERT TO UPSTREAM OF TOWNLEY, NO BOX UNDER TOWNLEY
 STATION    INVERT   DEPTH     W.S.       Q       VEL     VEL     ENERGY   SUPER  CRITICAL          HGT/   BASE/    ZL   NO  AVBPR
            ELEV   OF FLOW    ELEV                       HEAD   GRD.EL.   ELEV   DEPTH            DIA    ID NO.        PIER
 L/ELEM     SO                                         SF AVE    HF                     NORM DEPTH                  ZR
*****************************************************************************************************************************
   791.00   56.65    7.04     63.69   1220.0    4.68     .34    64.03    .00    3.57            7.00   30.00   1.00   0   .00
   142.00   .00197                                    .00030     .04                    3.96                    1.00
   933.00   56.93    6.77     63.70   1220.0    4.90     .37    64.07    .00    3.57            7.00   30.00   1.00   0   .00
TRANS STR   .00000                                    .00200     .00                                            1.00
   933.00   56.93    6.77     63.70   1220.0    4.90     .37    64.07    .00    3.57            7.00   30.00   1.00   0   .00
    30.00   .00233                                    .00201     .06                    6.47                    1.00
   963.00   57.00    6.76     63.76   1220.0    4.91     .37    64.13    .00    3.57            7.00   30.00   1.00   0   .00
TRANS STR   .25000                                                                                               1.00
   983.00   62.00    1.95     63.95   1220.0   11.59    2.09    66.04    .00    2.62            3.00   15.00   ****   0   .00
TRANS STR   .25000                                    .03226     .00                                            ****
   983.00   62.00    1.95     63.95   1220.0   11.59    2.09    66.04    .00    2.62            3.00   15.00   ****   0   .00
     2.01   .02000                                    .03262     .07                    2.16                    ****
   985.01   62.04    1.94     63.98   1220.0   11.69    2.12    66.10    .00    2.62            3.00   15.00   ****   0   .00
    10.44   .02000                                    .03524     .37                    2.16                    ****
   995.45   62.25    1.89     64.14   1220.0   12.26    2.33    66.47    .00    2.62            3.00   15.00   ****   0   .00
     9.06   .02000                                    .04005     .36                    2.16                    ****
  1004.51   62.43    1.84     64.27   1220.0   12.85    2.57    66.83    .00    2.62            3.00   15.00   ****   0   .00
     8.08   .02000                                    .04552     .37                    2.16                    ****
  1012.59   62.59    1.78     64.38   1220.0   13.48    2.82    67.20    .00    2.62            3.00   15.00   ****   0   .00
     7.35   .02000                                    .05174     .38                    2.16                    ****
  1019.94   62.74    1.74     64.47   1220.0   14.14    3.11    67.58    .00    2.62            3.00   15.00   ****   0   .00
     6.77   .02000                                    .05881     .40                    2.16                    ****
                                                                                                                          PAGE    2
                                          WATER SURFACE PROFILE LISTING
                        TENTH STREET WASH     FILE NAME: TOWNDIP
                        ALTERNATIVE C1A FLOW ANALYSIS
                        FROM BYPASS FLOW CULVERT TO UPSTREAM OF TOWNLEY, NO BOX UNDER TOWNLEY
 STATION    INVERT   DEPTH     W.S.       Q       VEL     VEL     ENERGY   SUPER  CRITICAL          HGT/   BASE/    ZL   NO  AVBPR
            ELEV   OF FLOW    ELEV                       HEAD   GRD.EL.   ELEV   DEPTH            DIA    ID NO.        PIER
 L/ELEM     SO                                         SF AVE    HF                     NORM DEPTH                  ZR
*****************************************************************************************************************************
  1026.71   62.87    1.69     64.56   1220.0   14.83    3.42    67.98    .00    2.62            3.00   15.00   ****   0   .00
     6.29   .02000                                    .06685     .42                    2.16                    ****
  1033.00   63.00    1.64     64.64   1220.0   15.55    3.76    68.40    .00    2.62            3.00   15.00   ****   0   .00
TRANS STR  -.05000                                    .05844    1.17                                            ****
  1053.00   62.00    5.41     67.41   1220.0   12.19    2.31    69.72    .00    5.91           10.00    5.00   3.00   0   .00
UTRANS STR -.05000                                    .01446     .00                                            2.00
  1053.00   62.00    5.41     67.41   1220.0   12.19    2.31    69.72    .00    5.91           10.00    5.00   3.00   0   .00
     7.19   .01667                                    .01423     .10                    5.24                    2.00
  1060.19   62.12    5.44     67.56   1220.0   12.04    2.25    69.82    .00    5.91           10.00    5.00   3.00   0   .00
    15.18   .01667                                    .01316     .20                    5.24                    2.00
  1075.37   62.37    5.60     67.97   1220.0   11.48    2.05    70.02    .00    5.91           10.00    5.00   3.00   0   .00
```

6.07	.01667					.01159	.07			5.24			2.00		
1081.44	62.47	5.75	68.22	1220.0	10.95	1.86	70.09	.00	5.91		10.00	5.00	3.00	0	.00
1.56	.01667					.01020	.02			5.24			2.00		
1083.00	62.50	5.91	68.41	1220.0	10.44	1.69	70.10	.00	5.91		10.00	5.00	3.00	0	.00

EXHIBIT B-5
OPEN CHANNEL CAPACITY
(FROM TOWNLEY TO HEADWALL

STORM DRAIN ANALYSIS PLUS

Original version by Los Angeles County Public Works
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Version
Serial Number

Sep 7, 1995 7:14:11

Input file : 10c1r.dat
Output file: 10c1r.out

INPUT FILE LISTING

```
T1 TENTH STREET WASH    FILE NAME: 10C1R.DAT
T2 ALTERNATIVE C FLOW ANALYSIS
T3 FROM DOWNSTREAM OF ALICE AVE TO BEGINNING OF BOX CULVERT
SO    100.00  51.10  1                          55.60
R     150.00  51.43  1      .030
TS    160.00  51.60  2      .050
R     190.00  51.90  2      .050
TS    200.00  52.00  3      .014
R     604.00  55.17  3      .014                          47.56
R     776.00  56.53  3      .014                          15.28
R     781.00  56.57  3      .014
TS    791.00  56.65  4      .014
SH                   4
1                                                  SP
                                WATER SURFACE PROFILE - CHANNEL DEFINITION LISTING                          PAGE    1
 CARD  SECT  CHN  NO OF  AVE PIER  HEIGHT 1  BASE   ZL   ZR   INV   Y(1)  Y(2)  Y(3)  Y(4)  Y(5)  Y(6)  Y(7)  Y(8)  Y(9)  Y(10)
 CODE   NO   TYPE PIERS   WIDTH    DIAMETER  WIDTH              DROP

 CD      1    1     0      .00      7.00    12.00  2.00  4.00   .00
 CD      2    2     0      .00      7.00    13.00               .00
 CD      3    3     1     1.00      4.00    13.00   .00   .00   .00
 CD      4    3     1     1.00      4.00    17.00   .00   .00   .00
                                                                                                   PAGE NO   1

                          WATER SURFACE PROFILE - TITLE CARD LISTING
0HEADING LINE NO 1 IS -
                            TENTH STREET WASH    FILE NAME: 10C1R.DAT
 HEADING LINE NO 2 IS -
                            ALTERNATIVE C FLOW ANALYSIS
0HEADING LINE NO 3 IS -
                            FROM DOWNSTREAM OF ALICE AVE TO BEGINNING OF BOX CULVERT
                                                                                                   PAGE NO   2
0                         WATER SURFACE PROFILE - ELEMENT CARD LISTING
0 ELEMENT NO   1 IS A SYSTEM OUTLET      *        *     *
                     U/S DATA   STATION    INVERT  SECT                                  W S ELEV
                                 100.00    51.10    1                                     55.60
0 ELEMENT NO   2 IS A REACH              *        *     *
                     U/S DATA   STATION    INVERT  SECT          N                   RADIUS  ANGLE  ANG PT  MAN H
                                 150.00    51.43    1         .030                      .00    .00     .00     0
 ELEMENT NO   3 IS A TRANSITION          *        *     *
                     U/S DATA   STATION    INVERT  SECT          N
                                 160.00    51.60    2         .050
 ELEMENT NO   4 IS A REACH               *        *     *
                     U/S DATA   STATION    INVERT  SECT          N                   RADIUS  ANGLE  ANG PT  MAN H
                                 190.00    51.90    2         .050                      .00    .00     .00     0
 ELEMENT NO   5 IS A TRANSITION          *        *     *
                     U/S DATA   STATION    INVERT  SECT          N
                                 200.00    52.00    3         .014
0 ELEMENT NO   6 IS A REACH              *        *     *
```

```
                    U/S DATA   STATION    INVERT  SECT          N                          RADIUS  ANGLE  ANG PT  MAN H
                               604.00     55.17    3           .014                           .00   47.56     .00      0
ELEMENT NO   7 IS A REACH          *         *     *
                    U/S DATA   STATION    INVERT  SECT          N                          RADIUS  ANGLE  ANG PT  MAN H
                               776.00     56.53    3           .014                           .00   15.28     .00      0
ELEMENT NO   8 IS A REACH          *         *     *
                    U/S DATA   STATION    INVERT  SECT          N                          RADIUS  ANGLE  ANG PT  MAN H
                               781.00     56.57    3           .014                           .00     .00     .00      0
ELEMENT NO   9 IS A TRANSITION     *         *     *
                    U/S DATA   STATION    INVERT  SECT          N
                               791.00     56.65    4           .014
ELEMENT NO  10 IS A SYSTEM HEADWORKS                *                    *
                    U/S DATA   STATION    INVERT  SECT                                W S ELEV
                               791.00     56.65    4                                     .00
NO EDIT ERRORS ENCOUNTERED-COMPUTATION IS NOW BEGINNING

** WARNING NO. 2 ** - WATER SURFACE ELEVATION GIVEN IS LESS THAN OR EQUALS INVERT ELEVATION IN HDWKDS, W.S.ELEV = INV + DC
                                                                                                                  PAGE    1
                                        WATER SURFACE PROFILE LISTING
                     TENTH STREET WASH    FILE NAME: 10C1R.DAT
                     ALTERNATIVE C FLOW ANALYSIS
                     FROM DOWNSTREAM OF ALICE AVE TO BEGINNING OF BOX CULVERT
 STATION    INVERT   DEPTH     W.S.       Q       VEL     VEL     ENERGY   SUPER  CRITICAL          HGT/   BASE/    ZL   NO  AVBPR
            ELEV   OF FLOW    ELEV                       HEAD    GRD.EL.  ELEV   DEPTH              DIA    ID NO.        PIER
 L/ELEM     SO                                         SF AVE    HF                   NORM DEPTH                     ZR
*****************************************************************************************************************************
  100.00    51.10     4.50     55.60    565.0    4.92     .38    55.98    .00    3.14            7.00    12.00   2.00   0   .00
   25.47   .00660                                      .00265     .07                    3.54                     4.00
  125.47    51.27     4.36     55.63    565.0    5.16     .41    56.04    .00    3.14            7.00    12.00   2.00   0   .00
   23.48   .00660                                      .00299     .07                    3.54                     4.00
  148.95    51.42     4.24     55.66    565.0    5.39     .45    56.11    .00    3.14            7.00    12.00   2.00   0   .00
HYDRAULIC JUMP                                                                                                     4.00
  148.95    51.42     2.23     53.65    565.0   13.58    2.87    56.52    .00    3.14            7.00    12.00   2.00   0   .00
    1.05   .00660                                      .04083     .04                    3.54                     4.00
  150.00    51.43     2.22     53.65    565.0   13.66    2.90    56.55    .00    3.14            7.00    12.00   2.00   0   .00
TRANS STR   .01700                                      .07877     .79                                             4.00
  160.00    51.60     3.89     55.49    565.0   11.18    1.94    57.43    .00    3.89            7.00    13.00    .00   0   .00
     .43   .01000                                      .04054     .02                    6.62                      .00
  160.43    51.60     4.08     55.68    565.0   10.66    1.77    57.45    .00    3.89            7.00    13.00    .00   0   .00
    1.51   .01000                                      .03544     .05                    6.62                      .00
  161.94    51.62     4.28     55.90    565.0   10.16    1.61    57.50    .00    3.89            7.00    13.00    .00   0   .00
    2.99   .01000                                      .03101     .09                    6.62                      .00
  164.92    51.65     4.48     56.13    565.0    9.69    1.46    57.59    .00    3.89            7.00    13.00    .00   0   .00
    5.03   .01000                                      .02715     .14                    6.62                      .00
  169.95    51.70     4.70     56.40    565.0    9.24    1.33    57.73    .00    3.89            7.00    13.00    .00   0   .00
    7.90   .01000                                      .02379     .19                    6.62                      .00
  177.85    51.78     4.93     56.71    565.0    8.81    1.21    57.92    .00    3.89            7.00    13.00    .00   0   .00
   12.07   .01000                                      .02086     .25                    6.62                      .00
                                                                                                                  PAGE    2
                                        WATER SURFACE PROFILE LISTING
                     TENTH STREET WASH    FILE NAME: 10C1R.DAT
                     ALTERNATIVE C FLOW ANALYSIS
                     FROM DOWNSTREAM OF ALICE AVE TO BEGINNING OF BOX CULVERT
 STATION    INVERT   DEPTH     W.S.       Q       VEL     VEL     ENERGY   SUPER  CRITICAL          HGT/   BASE/    ZL   NO  AVBPR
            ELEV   OF FLOW    ELEV                       HEAD    GRD.EL.  ELEV   DEPTH              DIA    ID NO.        PIER
 L/ELEM     SO                                         SF AVE    HF                   NORM DEPTH                     ZR
*****************************************************************************************************************************
  189.92    51.90     5.17     57.07    565.0    8.40    1.10    58.17    .00    3.89            7.00    13.00    .00   0   .00
     .08   .01000                                      .01949     .00                    6.62                      .00
  190.00    51.90     5.17     57.07    565.0    8.40    1.10    58.17    .00    3.89            7.00    13.00    .00   0   .00
     .00   .01000                                      .01050     .00                    6.62                      .00
  190.00    51.90     5.17     57.07    565.0    8.40    1.10    58.17    .00    3.89            7.00    13.00    .00   0   .00
TRANS STR   .01000                                      .00576     .06                                              .00
  200.00    52.00     4.25     56.25    565.0   11.89    2.20    58.45    .00    4.00            4.00    13.00    .00   1  1.00
  404.00   .00785                                      .00999    4.03                    3.60                      .00
  604.00    55.17     5.43     60.60    565.0   11.89    2.20    62.80    .00    4.00            4.00    13.00    .00   1  1.00
```

							.00999	1.72			3.59			.00		
0	172.00	.00791					2.20	64.70	.00	4.00		4.00	13.00	.00	1	1.00
	776.00	56.53	5.97	62.50	565.0	11.89					3.58			.00		
							.00999	.05								
	5.00	.00800					2.20	64.75	.00	4.00		4.00	13.00	.00	1	1.00
	781.00	56.57	5.98	62.55	565.0	11.89								.00		
							.00741	.07								
	0TRANS STR	.00800					1.23	64.92	.00	3.38		4.00	17.00	.00	1	1.00
	791.00	56.65	7.04	63.69	565.0	8.90										

	Initial (s)	Date
Measured in place by:		
Calculated by:	DMB	9-19-95
Checked by:	EDL	9-19-95

EXHIBIT B-6

LOW LEVEL OUTLET CAPACITIES
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Q = 1.486 A (R^2/3) (S^1/2)/n

Manning n = 0.013

Flow Condition	Diameter (inches)	Length (feet)	Upstream Water Surface Elevation (feet-NGVD)	Downstream Water Surface Elevation (feet-NGVD)	Slope (feet/feet)	Capacity (cfs)
Standard Capacity (Full Flow)	24	93	1249.50	1248.87	0.007	19
	36	719	1250.25	1248.87	0.002	29
	48	468	1248.87	1248.28	0.001	51
Design Condition	24	93	1258.70	1252.00	0.072	61
	36	719	1263.16	1252.00	0.016	83
	48	468	1251.70	1248.28	0.007	123

EXHIBIT B-7
PALMA PARK CBC CAPACITY

CURRENT DATE: 09-05-1995
CURRENT TIME: 19:47:31

FILE DATE: 10-04-1994
FILE NAME: PALMABX

FHWA CULVERT ANALYSIS
HY-8, VERSION 3.2

CULV #	SITE DATA: INLET ELEV. (FT)	SITE DATA: OUTLET ELEV. (FT)	SITE DATA: CULVERT LENGTH (FT)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (FT)	RISE (FT)	MANNING n	INLET TYPE
1	54.00	53.00	217.00	1 RCB	8.00	3.00	.014	CONVENTIONAL
2								
3								
4								
5								
6								

SUMMARY OF CULVERT FLOWS (CFS) FILE: PALMABX DATE: 10-04-1994

ELEV (FT)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
56.00	0	0	0	0	0	0	0	0	1
56.47	62	62	0	0	0	0	0	0	1
57.33	124	124	0	0	0	0	0	0	1
58.74	186	186	0	0	0	0	0	0	1
60.62	248	248	0	0	0	0	0	0	1
63.10	310	310	0	0	0	0	0	0	1
65.22	350	350	0	0	0	0	0	0	1
67.66	433	391	0	0	0	0	0	39	9
67.80	495	394	0	0	0	0	0	98	4
67.91	557	395	0	0	0	0	0	160	4
68.01	619	397	0	0	0	0	0	217	3
67.50	389	389	0	0	0	0	0	OVERTOPPING	

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: PALMABX DATE: 10-04-1994

HEAD ELEV(FT)	HEAD ERROR(FT)	TOTAL FLOW(CFS)	FLOW ERROR(CFS)	% FLOW ERROR
56.00	0.00	0	0	0.00
56.47	0.00	62	0	0.00
57.33	0.00	124	0	0.00
58.74	0.00	186	0	0.00
60.62	0.00	248	0	0.00
63.10	0.00	310	0	0.00
65.22	0.00	350	0	0.00
67.66	-0.01	433	3	0.78
67.80	-0.00	495	4	0.77
67.91	-0.01	557	2	0.37
68.01	-0.01	619	5	0.82

<1> TOLERANCE (FT) = 0.010 <2> TOLERANCE (%) = 1.000

CURRENT DATE: 09-05-1995
CURRENT TIME: 19:47:31

FILE DATE: 10-04-1994
FILE NAME: PALMABX

CULVERT # 1

PERFORMANCE CURVE FOR 1 BARREL(S)

Q (cfs)	HWE (ft)	TWE (ft)	ICH (ft)	OCH (ft)	FLOW TYPE	CCE (ft)	FCE (ft)	TCE (ft)	VO (fps)
0	56.00	56.00	0.00	2.00	0-NF	0.00	54.00	0.00	0.00
62	56.47	56.00	2.08	2.47	1-S1	0.00	0.00	0.00	2.58
124	57.33	56.00	3.33	3.16	1-S1	0.00	0.00	0.00	5.16
186	58.74	56.00	4.74	4.42	4-FF	0.00	0.00	0.00	7.74
248	60.62	56.00	6.62	6.29	4-FF	0.00	0.00	0.00	10.32
310	63.10	56.00	9.10	8.71	4-FF	0.00	0.00	0.00	12.90
350	65.22	56.00	11.22	10.58	4-FF	0.00	0.00	0.00	14.58
391	67.66	56.00	13.66	12.73	4-FF	0.00	0.00	0.00	16.31
394	67.79	56.00	13.79	12.85	4-FF	0.00	0.00	0.00	16.40
395	67.91	56.00	13.91	12.95	4-FF	0.00	0.00	0.00	16.48
397	68.00	56.00	14.00	13.03	4-FF	0.00	0.00	0.00	16.54

El. inlet face invert 54.00 ft El. outlet invert 53.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

```
***** SITE DATA ***** CULVERT INVERT **************
      INLET STATION (FT)                        0.00
      INLET ELEVATION (FT)                     54.00
      OUTLET STATION (FT)                     217.00
      OUTLET ELEVATION (FT)                    53.00
      NUMBER OF BARRELS                         1.00
      SLOPE (V-FT/H-FT)                         0.0046
      CULVERT LENGTH ALONG SLOPE (FT)         217.00

***** CULVERT DATA SUMMARY ************************
      BARREL SHAPE          BOX
      BARREL SPAN             8.00 FT
      BARREL RISE             3.00 FT
      BARREL MATERIAL       CONCRETE
      BARREL MANNING'S N    0.014
      INLET TYPE            CONVENTIONAL
      INLET EDGE AND WALL   SQUARE EDGE  (90-45 DEG.)
      INLET DEPRESSION      NONE
```

CURRENT DATE: 09-05-1995
CURRENT TIME: 19:47:31

FILE DATE: 10-04-1994
FILE NAME: PALMABX

TAILWATER

CONSTANT WATER SURFACE ELEVATION
56.00

ROADWAY OVERTOPPING DATA

ROADWAY SURFACE	PAVED
EMBANKMENT TOP WIDTH (FT)	60.00
CREST LENGTH (FT)	200.00
OVERTOPPING CREST ELEVATION (FT)	67.50

APPENDIX C

DERIVATION OF HEC-1 MODEL FOR DETENTION FACILITY NO. 2

Rating Curves Implemented in the HEC-1 Model to Represent Tenth Street Washington Detention Facility No. 2. Detailed Model Schematic is Provided in Exhibit C-1.

1. Palma Park discharge to Basin 2A (DIV1P)

   Method: DI/DQ diversion of all flow in excess of 350 cfs is diverted around the detention facility; remaining flow discharges into Basin 2A.

2. Diversion into basin 2A over broad crested weir (DIV2A)

   Method: DI/DQ diversion of weir flow. Rating curve derived from FEQ model results. Comparison to weir formula provided in Exhibit B-1.

3a. Discharge through 36-inch outlet from Basin 2A

   Method: SE/SQ rating curve (SITE2A) combines flow in 36-inch outlet with flow in drop structure. These flows are then split using DI/DQ Diversion. Rating curve for 36-inch pipe obtained from FEQ model results provided in Exhibit C-2.

4. Discharge through 24-inch outlet from Basin 2B

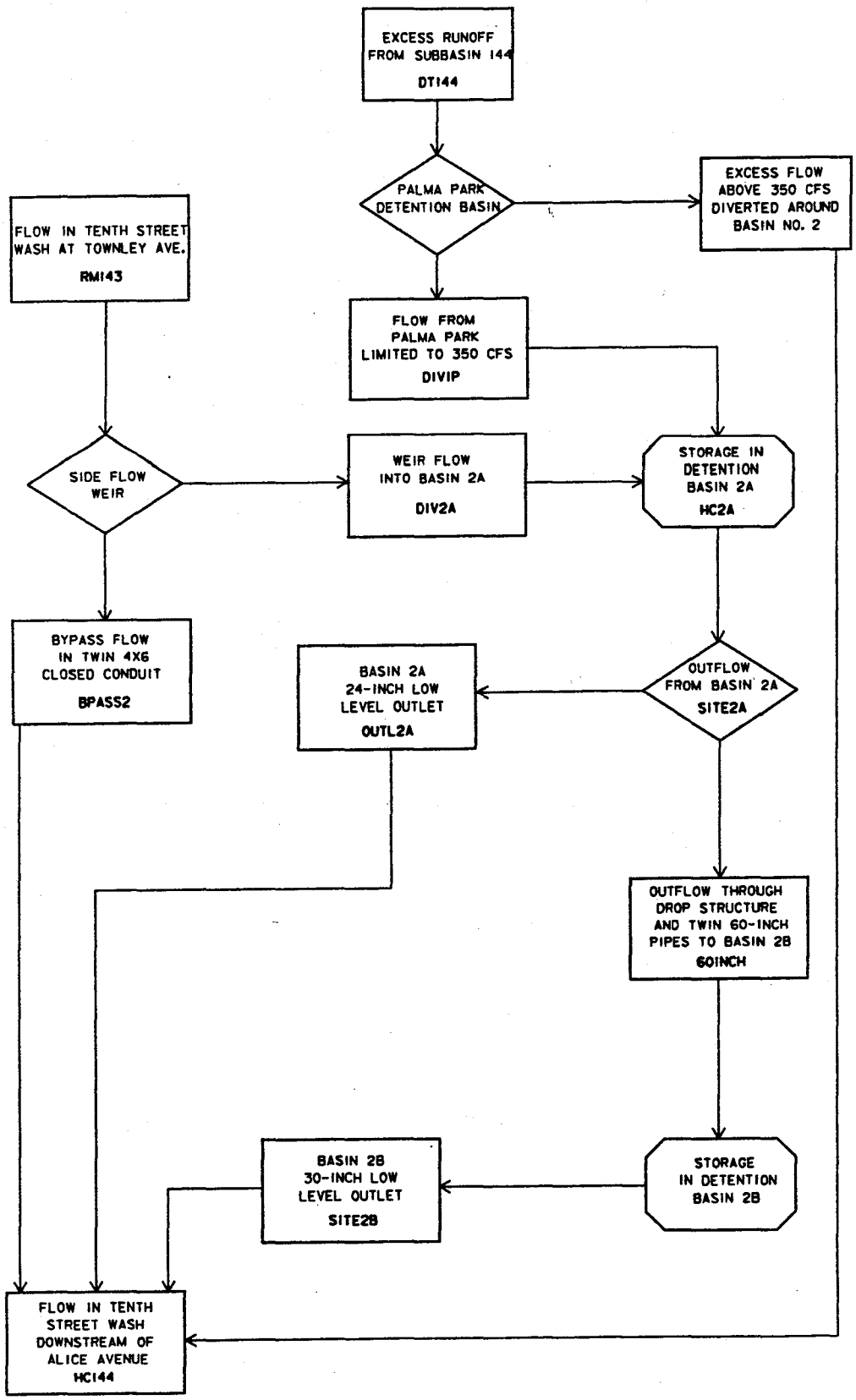
   Method: SE/SQ rating curve (SITE2B). Rating curve obtained from FEQ model results. provided in Exhibit C-3.

5. Discharge through grate in the top of the drop inlet to the twin 60-inch equalizer pipes which connect Basins 2A and 2B.

   Method: SE/SQ rating curve (SITE2A) which combines drop inlet flow with 24-inch low level outlet. These flows are later split into their component flows, OUTL2A and 60 INCH, using a DI/DQ diversion rating curve for drop inlet obtained using the orifice formula. Computations are provided in Exhibit B-2.

6. Storage volume provided in detention basins. Volume computations are in Exhibit C-4.

EXHIBIT C-1



RUST ENVIRONMENT & INFRASTRUCTURE

HEC-1 MODEL REPRESENTATION
TENTH STREET WASH
DETENTION BASIN NO. 2
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

	Initial (s)	Date
Measured in place by:		
Calculated by:	DMB	9-19-95
Checked by:	EDL	9-19-95

EXHIBIT C-2

RATING CURVE FOR OUTFLOW FROM BASIN 2A
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Elevation (feet - NGVD)	Total Outflow from FEQ * (cfs)	Flow in 36-inch Low Level Outlet (feet)
1248.70	14.1	14.1
1249.12	21.6	21.6
1250.19	37.3	37.3
1251.54	46.1	46.1
1253.55	56.7	56.7
1255.48	65.8	65.8
1256.17	87.5	69.0
1256.67	160.1	70.9
1257.25	296.5	72.9
1258.03	523.6	75.5
1259.02	619.2	78.3
1260.37	698.5	80.7
1263.15	801.0 **	85.5

* Combines 36-inch outlets and twin 60-inch flows
** Adjusted flow for use in HEC-1

	Initial (s)	Date
Measured in place by:		
Calculated by:	DMB	9-19-95
Checked by:	EDL	9-19-95

EXHIBIT C-3

RATING CURVE FOR OUTFLOW FROM BASIN 2B
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Elevation (feet - NGVD)	Total Outflow from FEQ (cfs)	Flow in 24-inch Low Level Outlet (feet)
1248.00	0.0	0.0
1252.00	17.7	17.7
1256.22	33.2	66.0
1258.11	42.0	84.0
1258.70	45.0	150.0
1259.50	-	240.0

	Initial (s)	Date
Measured in place by:		
Calculated by:	DMB	9-19-95
Checked by:	EDL	9-19-95

EXHIBT C-4A

BASIN 2A STAGE/STORAGE RELATION
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Elevation	Elev. Diff. (feet)	Area (acre)	Avg. Area (acre)	Volume (ac.-ft.)	Storage (ac.-ft.)
1247.25		0.00			
	0.75		0.34	0.25	0.25
1248		0.67			
	2.00		0.86	1.71	1.96
1250		1.04			
	2.00		1.04	2.08	4.04
1252		1.04			
	2.0		1.14	2.28	6.33
1254		1.24			
	2.0		1.34	2.68	9.01
1256		1.44			
	2.0		1.56	3.11	12.12
1258		1.67			
	2.0		1.79	3.57	15.69
1260.0		1.90			
	2.0		2.02	4.04	19.73
1262.0		2.14			
	1.0		2.20	2.20	21.93
1263		2.26			
	1		2.32	2.32	24.25
1264		2.38			

	Initial (s)	Date
Measured in place by:		
Calculated by:	DWB	9-19-95
Checked by:	EDL	9-19-95

EXHIBIT C-4B

BASIN 2B STAGE/STORAGE RELATION
Tenth Street Wash Detention Facility No. 2
Flood Control District of Maricopa County, Arizona

Elevation	Elev. Diff. (feet)	Area (acre)	Avg. Area (acre)	Volume (ac.-ft.)	Storage (ac.-ft.)
1247.5		0.00			
	0.5		1.33	0.66	0.66
1248		2.65			
	2.0		3.33	6.66	7.32
1250		4.01			
	2.0		4.19	8.38	15.70
1252		4.37			
	2.0		4.64	9.28	24.98
1254		4.91			
	2.0		5.14	10.29	35.27
1256		5.38			
	2.0		5.65	11.29	46.56
1258		5.92			
	0.5		5.99	2.99	49.55
1258.5		6.06			
	1.0		6.14	6.14	55.69
1259.5		6.21			
	0.5		6.36	3.18	58.87

EXHIBIT C-6

HEC-1 MODEL INPUT AND OUTPUT

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*           SEPTEMBER 1990             *
*            VERSION 4.0               *
*                                      *
* RUN DATE  09/19/1995  TIME  08:48:06 *
*                                      *
****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*          (916) 756-1104              *
*                                      *
****************************************
```

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

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

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


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

  1           ID       FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
  2           ID       TENTH STREET WASH DETENTION BASIN NO 2  (FCD 95-18)
  3           ID       PREPARED BY Rust Environment & Infrastructure Inc.
  4           ID       LAST REVISED: AUGUST 31, 1995
  5           ID       DCR ALTTERNATIVE C1A
  6           ID       HEC-1 INPUT FILENAME : ALTC1A.HC1
  7           ID
  8           ID       HEC-1 MODEL REPRESENTS THE PROPOSED TENTH STREET WASH DETENTION
  9           ID       BASINS 2A AND 2B. THESE ARE CONFIGURED AS FOLLOWS:
 10           ID           SIDE FLOW WEIR INLET TO BASIN 2A LENGTH: 142 FEET
 11           ID                                   CREST ELEVATION: 1260.3 FT
 12           ID           FLOW TO BASIN 2B VIA TWIN 60-INCH EQUALIZER PIPES
 13           ID           WITH 18 x 16 FT. DROP INLET AT ELEV, 1256.0
 14           ID           EFF. FLOW AREA OF GRATE IS 192 SQ FEET
 15           ID
 16           ID   ************************************************************************
 17           ID
 18           ID      EXISTING CONDITIONS MODEL PROVIDED BY STANLEY CONSULTANTS (SCI)
 19           ID  **** THE FOLLOWING COMMENTS WERE PRESENT IN THE MODEL DELIVERED BY SCI ****
 20           ID
 21           ID       FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 22           ID       TENTH STREET WASH DETENTION BASIN NO 1  (FCD 93-31)
 23           ID       STANLEY CONSULTANTS, INC.  (SCI JOB # 12183)
 24           ID
 25           ID       ************************************************************************
 26           ID       THIS MODEL REPRESENTS THE PROPOSED 10TH STREET WASH DETENTION BASIN #1.
 27           ID       THE FOLLOWING BASIN CHARACTERISTICS ARE EVALUATED:
 28           ID         1. INLET CONFIGURATION 1, INLET 1 CONSISTS OF A SIDE OVERFLOW WEIR
 29           ID            CONFIGURATION (100' WEIR 3.34' ABOVE FLOWLINE) FOR THE WEST TRIB
 30           ID            AND A WEIR INLET (30' WEIR AT CREST ELEV. 1321) FOR THE EAST TRIB.
 31           ID            INLET CONTROL CONDITIONS ASSUMED.
 32           ID         2. BASIN CONFIGURATION 1, 3:1 SIDES ON 3 SIDES AND A VERTICAL
 33           ID            RETAINING WALL ON THE WEST SIDE, A BOTTOM ELEVATION OF 1306, AND
 34           ID            25' ADDITIONAL R.O.W. ALONG THE SOUTH BASIN PARCEL BOUNDARY.
 35           ID         3. OUTLET CONFIGURATION 1, UTILIZING A 30" RCP TO CHASE GRADE AS THE
 36           ID            LOW FLOW AND PRINCIPAL OUTLET.
 37           ID       ****************************************************************************
 38           ID
 39           ID       ************************************************************************
 40           ID       THIS HEC-1 MODEL IS BASED ON THE KAMINSKI-HUBBARD ACDC ADMS AS MODIFIED
 41           ID       BY FCD TO REFLECT TWO HYPOTHETICAL DETENTION BASINS (NUMBERS 1 AND 2).
 42           ID       THE DIFFERENCES BETWEEN THIS MODEL AND THE ORIGINAL MODEL TRANSMITTED
 43           ID       BY FCD TO SCI AT THE PROJECT KICKOFF MEETING ARE AS FOLLOWS:
 44           ID         1. USE OF THE HEC-1 DATA STORAGE SYSTEM OPTION HAS BEEN DELETED;
 45           ID         2. THE TWO HYPOTHETICAL DETENTION BASINS 1 AND 2 HAVE BEEN DELETED;
 46           ID         3. THE CROSS SECTIONAL AREA OF THE PRINCIPAL SPILLWAY OUTLET PIPE OF
```

```
 47          ID            THE EXISTING CITY OF PHOENIX DET BASIN NO. 3 HAS BEEN CHANGED FROM
 48          ID            4.91 SQFT (WHICH CORRESPONDS TO AN OUTLET PIPE DIAM OF 30") TO
 49          ID            1.36 SQFT CORRESPONDING TO THE 14" X 14" STEEL ORIFICE PLATE WHICH
 50          ID            WAS ORIGINALLY DESIGNED AND INSTALLED.
 51          ID       ***********************************************************************
 52          ID
 53          ID   ***** THE FOLLOWING COMMENTS WERE WRITTEN BY KAMINSKI HUBBARD ENGINEERS ****
 54          ID
 55          ID   ACDC AREA DRAINAGE MASTER STUDY
1                                   HEC-1 INPUT                                          PAGE  2

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

 56          ID   10TH STREET WASH WATERSHED
 57          ID   FILENAME:  TEN36.DAT     KHE JOB NO. 0146
 58          ID   100-YEAR 6-HOUR DURATION STORM
             *
             *  Based on FCDMC comments dated March 17,1992 we adjusted the Mannings "n"
             *  coefficient to reflect weighted averaging in lieu of log averaging.
             *  We also changed the S-graph from Phoenix Mountain to Phoenix Valley.
             *
             *DIAGRAM
 59          IT       3                    300
 60          IO       5

 61          KK    140S
 62          KM   RUNOFF GENERATED ON SUB-BASIN 140
 63          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 64          KM    L= 1.22 mi.  Lca= 0.51 mi.  S= 162 ft/mi.  Kn= .050  LAG= 22.87 min.
 65          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 66          BA    .516
 67          IN      15
 68          KM   RAINFALL DEPTH OF 3.00 WAS SPATIALLY REDUCED AS SHOWN BY THE PB RECORD
 69          KM   AN AREAL REDUCTION COEFFICIENT OF .975 WAS USED
 70          PB  2.9200
 71          KM   THE FOLLOWING PC RECORD USED A 6-HOUR RAINFALL WITH PATTERN NO. 2.01
 72          PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 73          PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 74          PC    .950    .963    .975    .988   1.000
 75          LG    .145    .339   4.25    .488   20.44
 76          UI     76.    119.    294.    391.    468.    577.    793.    930.    712.    588.
 77          UI    474.    381.    274.    154.    127.     90.     76.     26.     23.     23.
 78          UI     23.     23.      0.      0.      0.      0.      0.      0.      0.      0.
 79          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 80          KK   DT140
 81          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 2.0 AC-FT FROM SUB-BASIN 140
 82          KM                                              (Hydrograph identified as OR140)
 83          KM                                            2) Balance of runoff continues on.
 84          KM                                              (Hydrograph identified as DT140)
 85          DT   OR140     2.0
 86          DI       0   10000
 87          DQ       0   10000
 88          KM   ******************************************************************************
 89          KM    KK 140RR
 90          KM    KM ROUTE FLOW THROUGH NORTH MOUNTAIN DETENTION NO.3
 91          KM    RS     1    ELEV    55.9
 92          KM    SV     0     .06    1.52    6.32   17.42   35.46   60.34   95.64
 93          KM    SE  55.9      58      62      66      70      74      78      82
 94          KM    SL 57.15    4.91      .6      .5
 95          KM       ***********************************************************************
 96          KM    THE SL RECORD (LOW-LEVEL OUTLET) SECOND FIELD (ORIFICE AREA) VALUE HAS
 97          KM    BEEN CHANGED BY SCI FROM 4.91 sq.ft. TO 1.36 sq.ft. (14"x14" INLET)
 98          KM       ***********************************************************************
 99          KM    SS 79.66     100     3.0     1.5
100          KM   ******************************************************************************
1                                   HEC-1 INPUT                                          PAGE  3

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

101          KK   140RR
102          KM   ROUTE FLOW THROUGH NORTH MOUNTAIN DETENTION NO.3
103          RS       1    ELEV    55.9
104          SV       0     .06    1.52    6.32   17.42   35.46   60.34   95.64
105          SE    55.9      58      62      66      70      74      78      82
106          SL   56.43    1.36      .6      .5
107          SS   80.00     100     3.0     1.5

108          KK   RM140
109          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION BASIN THROUGH SUB-BASIN 141
110          KM            1) Reach Length = 3600 ft.
111          RD
112          RC    .045    .045    .045    3600   .0108
```

```
113          RX       0       0    46.5    76.4    79.9   110.2   160.2   160.2
114          RY      16    12.6     7.3       0       0     9.9    15.9      16

115          KK    141S
116          KM   RUNOFF GENERATED ON SUB-BASIN 141
117          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
118          KM    L= 0.83 mi.  Lca= 0.57 mi.  S= 315 ft/mi.  Kn= .042  LAG= 15.26 min.
119          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
120          BA    .187
121          LG    .126    .303    3.61    .313   38.57
122          UI     41.    136.    222.    297.    467.    414.    304.    220.    131.     70.
123          UI     47.     23.     13.     13.     13.      0.      0.      0.      0.      0.
124          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

125          KK   DT141
126          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 2.4 AC-FT FROM SUB-BASIN 141
127          KM                                              (Hydrograph identified as OR141)
128          KM                                            2) Balance of runoff continues on.
129          KM                                              (Hydrograph identified as DT141)
130          DT   OR141     2.4
131          DI       0   10000
132          DQ       0   10000

133          KK   HC141
134          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 141 WITH ROUTED FLOW FROM DETENTION
135          HC       2
136          KM   ******************************************************************************

137          KK  DVT141   SPLIT HYDROGRAPH 141 TO DET142 AND HC142
138          KM           DI-DQ BASED ON HYDRAULIC RATING CURVE FOR PROPOSED INLET AND
139          KM           EXISTING 30" PIPE.  WEIR LENGTH IS 30' WEIR CREST IS ELEV 1321.
140          KM           DQ IS AMOUNT DIVERTED AROUND DETENTION BASIN DOWNSTREAM.
141          KM           DI-DQ DIFFERENCE IS ROUTED THRU THE PROPOSED DETENTION BASIN
142          DT  DVT141
143          DI       0      12      50     114     196     294
144          DQ       0      12      15      18      20      22
145          KM   ******************************************************************************
```



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

146          KK    142S
147          KM   RUNOFF GENERATED ON SUB-BASIN 142
148          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
149          KM    L= 1.16 mi.  Lca= 0.75 mi.  S= 257 ft/mi.  Kn= .042  LAG= 19.99 min.
150          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
151          BA    .512
152          LG    .127    .309    4.12    .267   34.03
153          UI     86.    178.    377.    488.    608.    839.   1049.    795.    637.    498.
154          UI    380.    210.    146.    107.     80.     26.     26.     26.     26.      0.
155          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
156          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

157          KK   DT142
158          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 3.6 AC-FT FROM SUB-BASIN 142
159          KM                                              (Hydrograph identified as OR142)
160          KM                                            2) Balance of runoff continues on.
161          KM                                              (Hydrograph identified as DT142)
162          DT   OR142     3.6
163          DI       0   10000
164          DQ       0   10000
165          KM   ******************************************************************************

166          KK  DVT142   SPLIT HYDROGRAPH DVT142 TO DET142 AND HC142
167          KM           DI-DQ BASED ON HYDRAULIC RATING CURVE FOR PROPOSED INLET AND
168          KM           IMPROVED WASH CROSS SECTION.  WEIR LENGTH IS 100' WEIR CREST ELEV IS
169          KM           3.34' ABOVE WASH FLOWLINE.
170          KM           DQ IS AMOUNT DIVERTED AROUND DETENTION BASIN DOWNSTREAM.
171          KM           DI-DQ DIFFERENCE IS ROUTED THRU THE PROPOSED DETENTION BASIN
172          DT  DVT142
173          DI       0     280     300     350     400     450     500     550     600     672
174          DQ       0     280     295     312     317     319     318     317     313     307

175          KK  ADD142
176          KM   COMBINE HYDROGRAPHS FROM (DI-DQ) FROM DVT141 WITH (DI-DQ) FROM DVT142
177          HC       2

178          KK  DET142   ROUTE HYDROGRAPH ADD142 THRU DET BASIN 142
179          KM           1-30" RCP  AS LOW FLOW AND PRINCIPAL OUTLET (INV. EL. 1306)
180          RS       1    STOR      -1
181          SV     .00   0.060   0.460   1.470   3.040   4.890   6.850   8.910   11.08   13.36
182          SV   15.74   18.23   20.83   23.53   26.33
183          SQ       0     4.5    15.9    29.0    37.0    44.0    50.0    55.0    60.0    65.0
```

```
 184          SQ      70      72      78      80      84
 185          SE    1306    1307    1308    1309    1310    1311    1312    1313    1314    1315
 186          SE    1316    1317    1318    1319    1320

 187          KK  DVT141    RETRIEVE PREVIOUSLY SPLIT HYDROGRAPH FROM SUB-BASIN 141
 188          DR  DVT141
1                                        HEC-1 INPUT                                          PAGE  5

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


 189          KK  DVT142    RETRIEVE PREVIOUSLY SPLIT HYDROGRAPH FROM SUB-BASIN 142
 190          DR  DVT142

 191          KK   HC142
 192          KM   COMBINE HYDROGRAPHS (DQ) FROM DVT142, (DQ) FROM DVT141 AND DET142 OUTFLOW
 193          HC       3
 194          KM   ******************************************************************************

 195          KK   RM142
 196          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASINS 141/142 THROUGH 143
 197          KM            1) Reach Length = 5140 ft.
 198          RD
 199          RC    .050    .045    .050    5140   .0086
 200          RX       0       0    43.8    61.3    67.4    78.3    89.8    89.8
 201          RY    10.8     9.4     9.4       0       0     5.4     8.8    10.8

 202          KK    143S
 203          KM   RUNOFF GENERATED ON SUB-BASIN 143
 204          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 205          KM    L= 1.64 mi.  Lca= 0.88  S= 273 ft/mi.  Kn= .035  LAG= 19.96 min.
 206          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 207          BA    .604
 208          LG    .115    .279    4.12    .269   49.66
 209          UI    102.    212.    446.    577.    720.    994.   1238.    937.    750.    586.
 210          UI    447.    244.    173.    125.     93.     31.     31.     31.     31.      0.
 211          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 212          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 213          KK   DT143
 214          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 5.7 AC-FT FROM SUB-BASIN 143
 215          KM                                               (Hydrograph identified as OR143)
 216          KM                                             2) Balance of runoff continues on.
 217          KM                                               (Hydrograph identified as DT143)
 218          DT   OR143     5.7
 219          DI       0   10000
 220          DQ       0   10000

 221          KK   HC143
 222          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 143 WITH ROUTED FLOW FROM 141/142
 223          HC       2

 224          KK   RM143
 225          KO       1
 226          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 143 THROUGH 144
 227          KM            1) Reach Length = 1400 ft.
 228          RD
 229          RC    .040    .035    .030    1400   .0100
 230          RX       0       0    77.8    88.3    96.6   112.8   161.3   161.3
 231          RY      10     6.2     6.2       0       0     6.3     6.9      10
1                                        HEC-1 INPUT                                          PAGE  6

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


 232          KK  BYPASS   IN CHANNEL FLOWS AROUND DETENTION FACILITY NO. 2
 233          KM   DI = FLOW IN 10TH STREET WASH AT TOWNLEY AVENUE
 234          KM   DQ = FLOW DIVERTED OVER SIDE FLOW WEIR INTO BASIN 2A
 235          KM   PEAK FLOW REDUCED TO ACCOUNT FOR WEIR SUBMERGENCE WHEN BASIN FILLS
 236          KM   PEAK BYPASS IS 580 CFS
 237          KM   BYPASS FLOW IN TRAPEZOIDAL OPEN CHANNEL AND TWIN 4X6 BOX CULVERTS
 238          DT   DIV2A
 239          DI       0   260.0   372.3   510.0   593.4   823.4   928.0    1010    1220
 240          DQ       0       0    92.2   196.5   264.6   450.2     500     555     660

 241          KK  DIV 2A    RETRIEVE DIVERTED FLOW TO BASIN 2A
 242          DR   DIV2A

 243          KK    144S
 244          KM   RUNOFF GENERATED ON SUB-BASIN 144
 245          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 246          KM    L= 1.80 mi.  Lca= 1.11 mi.  S= 291 ft/mi.  Kn= .036  LAG= 22.95 min.
 247          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 248          BA    .475
```

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 249        LG    .118    .280    3.61     .32   43.17
 250        UI     70.    108.    269.    357.    428.    527.    721.    857.    657.    543.
 251        UI    437.    353.    256.    145.    117.     85.     70.     26.     21.     21.
 252        UI     21.     21.      0.      0.      0.      0.      0.      0.      0.      0.
 253        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 254        KK   DT144
 255        KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 2.1 AC-FT FROM SUB-BASIN 144
 256        KM                                               (Hydrograph identified as OR144)
 257        KM                                            2) Balance of runoff continues on.
 258        KM                                               (Hydrograph identified as DT144)
 259        DT   OR144     2.1
 260        DI       0   10000
 261        DQ       0   10000

 262        KK   DIV1P    DIVERT PALMA PARK FLOWS OVER 350 CFS
 263        KO       1
 264        KM   DIVERSION REPRESENTS LOSS OF FLOW NOT ACCEPTED BY THE PALMA PARK INLET
 265        DT   DIV1P
 266        DI       0     350     351     615    1000
 267        DQ       0       0       1     265     650

 268        KK  SITE2A
 269        KM   COMBINE HYDROGRAPH FROM SUB-BASIN 144 WITH FLOW DIVERTED INTO BASIN 2A
 270        HC       2

 271        KK  SITE2A   DETENTION BASIN AT SITE 2A **************************
 272        KM        FLOW IS CONVEYED TO BASIN 2B THROUGH 2 @ 60-INCH PIPES
 273        KM        DROP INLET TO PIPES HAS CREST ELEVATION AT 1256
 274        KM        LOW FLOW OUTLET THROUGH 36 INCH PIPE
 275        KO       1       2
 276        RS       1    STOR       0
 277        SV      .0     1.8     3.7     6.0     8.7    11.8    15.3    19.4    23.9
 278        SE  1247.3    1250    1252    1254    1256    1258    1260    1262    1264
 279        SQ       0    14.1    21.6    37.3    46.1    56.7    65.8    87.5   160.1   296.5
```



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

 280        SQ   523.6   619.2   698.5     801
 281        SE  1247.3 1248.70 1249.12 1250.19 1251.54 1253.55 1255.48 1256.17 1256.67 1257.25
 282        SE  1258.0 1259.02 1260.37 1263.15

 283        KK  60INCH    OVERFLOW INTO BASIN 2B THROUGH TWIN 60-INCH PIPES
 284        KM            DIVERT BASIN 2A LOW FLOW OUTLET (36" RCP)
 285        KM            DIVERSION OF BASIN 2A LOW LEVEL OUTLET AWAY FROM BASIN 2B
 286        DT  OUTL2A
 287        DI       0    65.8    87.5   160.1   296.5   523.6   619.2   698.5   801.0   819.5
 288        DQ       0    65.8    69.0    70.9    72.9    75.5    78.3    80.7    85.5    87.0

 289        KK  SITE2B    DETENTION BASIN AT SITE 2B **************************
 290        KM            OUTFLOW THROUGH 24 INCH RCP
 291        KM            FLOWS INCREASED ABOVE ELEV 1256 TO ACCOUNT FOR SUBMERGENCE
 292        KM            THAT REDUCES OVERALL INFLOW TO FACILITY NO. 2
 293        KM            STORAGE INCLUDES 0.4 AC-FT IN TWIN 60 INCH PIPES
 294        KO       1       2
 295        RS       1    ELEV    1248
 296        SV      .0     6.9    15.3    24.7    35.0    46.3    52.4    58.7
 297        SE    1248    1250    1252    1254    1256    1258    1259    1260
 298        SQ       0    17.7    66.0    84.0   150.0   240.0
 299        SE    1248 1252.00 1256.22 1258.11 1258.70  1259.5

 300        KK   RET1P    RETRIEVE DIVERTED PALMA PARK FLOW
 301        DR   DIV1P

 302        KK  2A RET    RETRIEVE BASIN 2A OUTFLOW FROM 24" RCP
 303        DR  OUTL2A

 304        KK   HC144   RECOMBINE IN CHANNEL FLOW WITH OUTFLOW FROM DETENTION BASIN 2
 305        KM           AND PALMA PARK FLOW
 306        HC       4

 307        KK   RM144
 308        KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 144 THROUGH 145
 309        KM            1) Reach Length = 3000 ft.
 310        RD
 311        RC    .035    .035    .030    3000   .0073
 312        RX       0       0    36.6      52    64.9    79.8   107.8   107.8
 313        RY      11     7.7     7.4       0       0     8.3     8.5      11

 314        KK    145S
 315        KM   RUNOFF GENERATED ON SUB-BASIN 145
 316        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 317        KM    L= 1.37 mi.  Lca= 0.86 mi.  S= 242 ft/mi.  Kn= .032  LAG= 17.28 min.
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318          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
319          BA    .548
320          LG    .105    .265    5.67    .210   44.60
321          UI    107.    287.    526.    678.    922.   1303.    982.    755.    568.    378.
322          UI    186.    145.     98.     33.     33.     33.     33.      0.      0.      0.
323          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                                HEC-1 INPUT                                          PAGE  8

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


324          KK   HC145
325          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 145 WITH ROUTED FLOW FROM 144
326          KM   ALSO DETERMINES 10TH STREET WASH DISCHARGE INTO ACDC
327          HC       2
328          ZZ
1
             SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   61       140S
               .
               .
   85          .------->   OR140
   80      DT140
               V
               V
  101      140RR
               V
               V
  108      RM140
               .
               .
  115          .        141S
               .           .
               .           .
  130          .           .------->   OR141
  125          .       DT141
               .           .
               .           .
  133      HC141............
               .
               .
  142          .------->  DVT141
  137     DVT141
               .
               .
  146          .        142S
               .           .
               .           .
  162          .           .------->   OR142
  157          .       DT142
               .           .
               .           .
  172          .           .------->  DVT142
  166          .      DVT142
               .           .
               .           .
  175     ADD142............
               V
               V
  178     DET142
               .
               .
  188          .           .<-------  DVT141
  187          .      DVT141
               .           .
               .           .
  190          .           .           .<-------  DVT142
  189          .           .      DVT142
               .           .           .
               .           .           .
  191      HC142........................
               V
               V
  195      RM142
               .
               .
  202          .        143S
               .           .
               .           .
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218          .          .-------> OR143
213          .      DT143
             .          .
             .          .
221      HC143............
             V
             V
224      RM143
             .
             .
238          .-------> DIV2A
232     BYPASS
             .
             .
242          .          .<-------  DIV2A
241          .     DIV 2A
             .          .
             .          .
243          .          .       144S
             .          .          .
             .          .          .
259          .          .          .-------> OR144
254          .          .      DT144
             .          .          .
             .          .          .
265          .          .          .-------> DIV1P
262          .          .      DIV1P
             .          .          .
             .          .          .
268          .     SITE2A............
             .          V
             .          V
271          .     SITE2A
             .          .
             .          .
286          .          .-------> OUTL2A
283          .     60INCH
             .          V
             .          V
289          .     SITE2B
             .          .
             .          .
301          .          .          .<-------  DIV1P
300          .          .      RET1P
             .          .          .
             .          .          .
303          .          .          .          .<-------  OUTL2A
302          .          .          .     2A RET
             .          .          .          .
             .          .          .          .
304      HC144.................................
             V
             V
307      RM144
             .
             .
314          .       145S
             .          .
             .          .
324      HC145............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            SEPTEMBER 1990             *
*             VERSION 4.0               *
*                                       *
*  RUN DATE  09/19/1995  TIME  08:48:06 *
*                                       *
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
TENTH STREET WASH DETENTION BASIN NO 2 (FCD 95-18)
PREPARED BY Rust Environment & Infrastructure Inc.
LAST REVISED: AUGUST 31, 1995
DCR ALTTERNATIVE C1A
HEC-1 INPUT FILENAME : ALTC1A.HC1

HEC-1 MODEL REPRESENTS THE PROPOSED TENTH STREET WASH DETENTION

```
                    BASINS 2A AND 2B. THESE ARE CONFIGURED AS FOLLOWS:
                        SIDE FLOW WEIR INLET TO BASIN 2A LENGTH: 142 FEET
                                                CREST ELEVATION: 1260.3 FT
                        FLOW TO BASIN 2B VIA TWIN 60-INCH EQUALIZER PIPES
                        WITH 18 x 16 FT. DROP INLET AT ELEV, 1256.0
                        EFF. FLOW AREA OF GRATE IS 192 SQ FEET

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

                    EXISTING CONDITIONS MODEL PROVIDED BY STANLEY CONSULTANTS (SCI)
                **** THE FOLLOWING COMMENTS WERE PRESENT IN THE MODEL DELIVERED BY SCI ****

                    FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
                    TENTH STREET WASH DETENTION BASIN NO 1  (FCD 93-31)
                    STANLEY CONSULTANTS, INC.  (SCI JOB # 12183)

                    ************************************************************************
                    THIS MODEL REPRESENTS THE PROPOSED 10TH STREET WASH DETENTION BASIN #1.
                    THE FOLLOWING BASIN CHARACTERISTICS ARE EVALUATED:
                      1. INLET CONFIGURATION 1, INLET 1 CONSISTS OF A SIDE OVERFLOW WEIR
                         CONFIGURATION (100' WEIR 3.34' ABOVE FLOWLINE) FOR THE WEST TRIB
                         AND A WEIR INLET (30' WEIR AT CREST ELEV. 1321) FOR THE EAST TRIB.
                         INLET CONTROL CONDITIONS ASSUMED.
                      2. BASIN CONFIGURATION 1, 3:1 SIDES ON 3 SIDES AND A VERTICAL
                         RETAINING WALL ON THE WEST SIDE, A BOTTOM ELEVATION OF 1306, AND
                         25' ADDITIONAL R.O.W. ALONG THE SOUTH BASIN PARCEL BOUNDARY.
                      3. OUTLET CONFIGURATION 1, UTILIZING A 30" RCP TO CHASE GRADE AS THE
                         LOW FLOW AND PRINCIPAL OUTLET.
                    ************************************************************************

                    ************************************************************************
                    THIS HEC-1 MODEL IS BASED ON THE KAMINSKI-HUBBARD ACDC ADMS AS MODIFIED
                    BY FCD TO REFLECT TWO HYPOTHETICAL DETENTION BASINS (NUMBERS 1 AND 2).
                    THE DIFFERENCES BETWEEN THIS MODEL AND THE ORIGINAL MODEL TRANSMITTED
                    BY FCD TO SCI AT THE PROJECT KICKOFF MEETING ARE AS FOLLOWS:
                      1. USE OF THE HEC-1 DATA STORAGE SYSTEM OPTION HAS BEEN DELETED;
                      2. THE TWO HYPOTHETICAL DETENTION BASINS 1 AND 2 HAVE BEEN DELETED;
                      3. THE CROSS SECTIONAL AREA OF THE PRINCIPAL SPILLWAY OUTLET PIPE OF
                         THE EXISTING CITY OF PHOENIX DET BASIN NO. 3 HAS BEEN CHANGED FROM
                         4.91 SQFT (WHICH CORRESPONDS TO AN OUTLET PIPE DIAM OF 30") TO
                         1.36 SQFT CORRESPONDING TO THE 14" X 14" STEEL ORIFICE PLATE WHICH
                         WAS ORIGINALLY DESIGNED AND INSTALLED.
                    ************************************************************************

                ***** THE FOLLOWING COMMENTS WERE WRITTEN BY KAMINSKI HUBBARD ENGINEERS ****

                ACDC AREA DRAINAGE MASTER STUDY
                10TH STREET WASH WATERSHED
                FILENAME:  TEN36.DAT     KHE JOB NO. 0146
                100-YEAR 6-HOUR DURATION STORM

60 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     1    0  STARTING DATE
                 ITIME        0000  STARTING TIME
                    NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE     1    0  ENDING DATE
                NDTIME        1457  ENDING TIME
                 ICENT          19  CENTURY MARK

             COMPUTATION INTERVAL     .05 HOURS
                 TOTAL TIME BASE   14.95 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

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

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          *            *
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224 KK      *     RM143  *
            *            *
            **************

225 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                         MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 143 THROUGH 144
                                  1) Reach Length = 1400 ft.

               HYDROGRAPH ROUTING DATA

228 RD          MUSKINGUM-CUNGE CHANNEL ROUTING

229 RC          NORMAL DEPTH CHANNEL
                        ANL       .040  LEFT OVERBANK N-VALUE
                       ANCH       .035  MAIN CHANNEL N-VALUE
                        ANR       .030  RIGHT OVERBANK N-VALUE
                      RLNTH      1400.  REACH LENGTH
                        SEL      .0100  ENERGY SLOPE
                      ELMAX         .0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                   CROSS-SECTION DATA
                          --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
231 RY        ELEVATION    10.00      6.20      6.20       .00       .00      6.30      6.90     10.00
230 RX        DISTANCE       .00       .00     77.80     88.30     96.60    112.80    161.30    161.30

                                                  ***

                                   COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .16       .36       .59       .87      1.18      1.53      1.91      2.34      2.80
          OUTFLOW        .00     12.58     41.94     87.02    148.56    227.67    325.56    443.47    582.63    744.26
        ELEVATION        .00       .53      1.05      1.58      2.11      2.63      3.16      3.68      4.21      4.74

          STORAGE       3.30      3.84      4.71      7.00      9.72     12.45     15.18     17.91     20.64     23.36
          OUTFLOW     929.56   1139.70   1390.17   1866.93   2579.43   3481.11   4542.46   5746.71   7081.82   8538.41
        ELEVATION       5.26      5.79      6.32      6.84      7.37      7.89      8.42      8.95      9.47     10.00

                          COMPUTED MUSKINGUM-CUNGE PARAMETERS
                                COMPUTATION TIME STEP
                ELEMENT    ALPHA      M        DT        DX      PEAK    TIME TO     VOLUME    MAXIMUM
                                                                          PEAK                  CELERITY
                                                (MIN)      (FT)    (CFS)    (MIN)      (IN)     (FPS)

                  MAIN                           2.19    700.00  1220.60   252.19      1.49     10.64


                                  INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


                  MAIN                           3.00            1220.23   252.00      1.49

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1450E+03 EXCESS= .0000E+00 OUTFLOW= .1449E+03 BASIN STORAGE= .2244E+00 PERCENT ERROR=    .0


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

                                   HYDROGRAPH AT STATION    RM143

*****************************************************************************************************************************
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DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1		0345	76	294.	1		0730	151	76.	1		1115	226	44.
1		0003	2	0.	1		0348	77	375.	1		0733	152	76.	1		1118	227	43.
1		0006	3	0.	1		0351	78	516.	1		0736	153	76.	1		1121	228	43.
1		0009	4	0.	1		0354	79	680.	1		0739	154	75.	1		1124	229	43.
1		0012	5	0.	1		0357	80	834.	1		0742	155	75.	1		1127	230	42.
1		0015	6	0.	1		0400	81	980.	1		0745	156	74.	1		1130	231	42.
1		0018	7	0.	1		0403	82	1094.	1		0748	157	74.	1		1133	232	41.
1		0021	8	0.	1		0406	83	1172.	1		0751	158	73.	1		1136	233	40.
1		0024	9	0.	1		0409	84	1209.	1		0754	159	73.	1		1139	234	39.
1		0027	10	0.	1		0412	85	1220.	1		0757	160	72.	1		1142	235	39.
1		0030	11	0.	1		0415	86	1215.	1		0800	161	72.	1		1145	236	38.
1		0033	12	0.	1		0418	87	1188.	1		0803	162	72.	1		1148	237	37.
1		0036	13	0.	1		0421	88	1136.	1		0806	163	71.	1		1151	238	37.
1		0039	14	0.	1		0424	89	1071.	1		0809	164	71.	1		1154	239	36.
1		0042	15	0.	1		0427	90	1011.	1		0812	165	70.	1		1157	240	35.
1		0045	16	0.	1		0430	91	952.	1		0815	166	70.	1		1200	241	35.
1		0048	17	0.	1		0433	92	891.	1		0818	167	69.	1		1203	242	34.

1	0051	18	0.	*	1	0436	93	826.	*	1	0821	168	69.	*	1	1206	243	34.
1	0054	19	0.	*	1	0439	94	762.	*	1	0824	169	69.	*	1	1209	244	33.
1	0057	20	0.	*	1	0442	95	705.	*	1	0827	170	68.	*	1	1212	245	33.
1	0100	21	0.	*	1	0445	96	650.	*	1	0830	171	68.	*	1	1215	246	32.
1	0103	22	0.	*	1	0448	97	593.	*	1	0833	172	67.	*	1	1218	247	32.
1	0106	23	0.	*	1	0451	98	530.	*	1	0836	173	67.	*	1	1221	248	31.
1	0109	24	0.	*	1	0454	99	467.	*	1	0839	174	67.	*	1	1224	249	31.
1	0112	25	0.	*	1	0457	100	410.	*	1	0842	175	66.	*	1	1227	250	31.
1	0115	26	0.	*	1	0500	101	360.	*	1	0845	176	66.	*	1	1230	251	30.
1	0118	27	0.	*	1	0503	102	319.	*	1	0848	177	65.	*	1	1233	252	30.
1	0121	28	0.	*	1	0506	103	283.	*	1	0851	178	65.	*	1	1236	253	30.
1	0124	29	0.	*	1	0509	104	252.	*	1	0854	179	65.	*	1	1239	254	29.
1	0127	30	0.	*	1	0512	105	226.	*	1	0857	180	64.	*	1	1242	255	29.
1	0130	31	0.	*	1	0515	106	205.	*	1	0900	181	64.	*	1	1245	256	28.
1	0133	32	0.	*	1	0518	107	188.	*	1	0903	182	63.	*	1	1248	257	28.
1	0136	33	0.	*	1	0521	108	176.	*	1	0906	183	63.	*	1	1251	258	28.
1	0139	34	0.	*	1	0524	109	166.	*	1	0909	184	63.	*	1	1254	259	27.
1	0142	35	0.	*	1	0527	110	157.	*	1	0912	185	62.	*	1	1257	260	27.
1	0145	36	0.	*	1	0530	111	151.	*	1	0915	186	62.	*	1	1300	261	26.
1	0148	37	0.	*	1	0533	112	146.	*	1	0918	187	61.	*	1	1303	262	26.
1	0151	38	0.	*	1	0536	113	142.	*	1	0921	188	61.	*	1	1306	263	26.
1	0154	39	0.	*	1	0539	114	140.	*	1	0924	189	60.	*	1	1309	264	25.
1	0157	40	0.	*	1	0542	115	138.	*	1	0927	190	60.	*	1	1312	265	25.
1	0200	41	0.	*	1	0545	116	136.	*	1	0930	191	59.	*	1	1315	266	25.
1	0203	42	0.	*	1	0548	117	135.	*	1	0933	192	59.	*	1	1318	267	25.
1	0206	43	0.	*	1	0551	118	134.	*	1	0936	193	59.	*	1	1321	268	25.
1	0209	44	0.	*	1	0554	119	134.	*	1	0939	194	58.	*	1	1324	269	24.
1	0212	45	0.	*	1	0557	120	133.	*	1	0942	195	58.	*	1	1327	270	24.
1	0215	46	0.	*	1	0600	121	132.	*	1	0945	196	57.	*	1	1330	271	24.
1	0218	47	0.	*	1	0603	122	132.	*	1	0948	197	57.	*	1	1333	272	24.
1	0221	48	0.	*	1	0606	123	131.	*	1	0951	198	56.	*	1	1336	273	24.
1	0224	49	0.	*	1	0609	124	129.	*	1	0954	199	56.	*	1	1339	274	24.
1	0227	50	0.	*	1	0612	125	127.	*	1	0957	200	55.	*	1	1342	275	24.
1	0230	51	0.	*	1	0615	126	125.	*	1	1000	201	55.	*	1	1345	276	24.
1	0233	52	0.	*	1	0618	127	122.	*	1	1003	202	54.	*	1	1348	277	23.
1	0236	53	0.	*	1	0621	128	118.	*	1	1006	203	54.	*	1	1351	278	23.
1	0239	54	0.	*	1	0624	129	114.	*	1	1009	204	54.	*	1	1354	279	23.
1	0242	55	0.	*	1	0627	130	109.	*	1	1012	205	53.	*	1	1357	280	23.
1	0245	56	0.	*	1	0630	131	105.	*	1	1015	206	53.	*	1	1400	281	23.
1	0248	57	0.	*	1	0633	132	102.	*	1	1018	207	52.	*	1	1403	282	23.
1	0251	58	0.	*	1	0636	133	98.	*	1	1021	208	52.	*	1	1406	283	23.
1	0254	59	0.	*	1	0639	134	95.	*	1	1024	209	51.	*	1	1409	284	23.
1	0257	60	0.	*	1	0642	135	92.	*	1	1027	210	51.	*	1	1412	285	23.
1	0300	61	0.	*	1	0645	136	89.	*	1	1030	211	51.	*	1	1415	286	23.
1	0303	62	0.	*	1	0648	137	87.	*	1	1033	212	50.	*	1	1418	287	23.
1	0306	63	0.	*	1	0651	138	85.	*	1	1036	213	50.	*	1	1421	288	23.
1	0309	64	0.	*	1	0654	139	84.	*	1	1039	214	49.	*	1	1424	289	23.
1	0312	65	0.	*	1	0657	140	83.	*	1	1042	215	49.	*	1	1427	290	23.
1	0315	66	0.	*	1	0700	141	82.	*	1	1045	216	48.	*	1	1430	291	23.
1	0318	67	0.	*	1	0703	142	81.	*	1	1048	217	48.	*	1	1433	292	23.
1	0321	68	2.	*	1	0706	143	80.	*	1	1051	218	47.	*	1	1436	293	23.
1	0324	69	37.	*	1	0709	144	80.	*	1	1054	219	47.	*	1	1439	294	22.
1	0327	70	85.	*	1	0712	145	79.	*	1	1057	220	46.	*	1	1442	295	22.
1	0330	71	101.	*	1	0715	146	79.	*	1	1100	221	46.	*	1	1445	296	22.
1	0333	72	119.	*	1	0718	147	78.	*	1	1103	222	46.	*	1	1448	297	22.
1	0336	73	145.	*	1	0721	148	78.	*	1	1106	223	45.	*	1	1451	298	22.
1	0339	74	184.	*	1	0724	149	77.	*	1	1109	224	45.	*	1	1454	299	22.
1	0342	75	234.	*	1	0727	150	77.	*	1	1112	225	44.	*	1	1457	300	22.
				*					*					*				

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	14.95-HR
+ (CFS)	(HR)					
		(CFS)				
+ 1220.	4.20		258.	117.	117.	117.
		(INCHES)	1.319	1.493	1.493	1.493
		(AC-FT)	128.	145.	145.	145.

CUMULATIVE AREA = 1.82 SQ MI

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          *            *
262 KK    *     DIV1P  *        DIVERT PALMA PARK FLOWS OVER 350 CFS
          *            *
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263 KO OUTPUT CONTROL VARIABLES

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                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                       DIVERSION REPRESENTS LOSS OF FLOW NOT ACCEPTED BY THE PALMA PARK INLET

  DT          DIVERSION
                    ISTAD       DIV1P  DIVERSION HYDROGRAPH IDENTIFICATION

  DI             INFLOW         .00    350.00    351.00    615.00   1000.00

  DQ       DIVERTED FLOW        .00       .00      1.00    265.00    650.00

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DIVERSION HYDROGRAPH DIV1P

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DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0345	76	0.	*	1		0730	151	0.	*	1		1115	226	0.
1		0003	2	0.	*	1		0348	77	0.	*	1		0733	152	0.	*	1		1118	227	0.
1		0006	3	0.	*	1		0351	78	0.	*	1		0736	153	0.	*	1		1121	228	0.
1		0009	4	0.	*	1		0354	79	36.	*	1		0739	154	0.	*	1		1124	229	0.
1		0012	5	0.	*	1		0357	80	94.	*	1		0742	155	0.	*	1		1127	230	0.
1		0015	6	0.	*	1		0400	81	146.	*	1		0745	156	0.	*	1		1130	231	0.
1		0018	7	0.	*	1		0403	82	190.	*	1		0748	157	0.	*	1		1133	232	0.
1		0021	8	0.	*	1		0406	83	229.	*	1		0751	158	0.	*	1		1136	233	0.
1		0024	9	0.	*	1		0409	84	256.	*	1		0754	159	0.	*	1		1139	234	0.
1		0027	10	0.	*	1		0412	85	265.	*	1		0757	160	0.	*	1		1142	235	0.
1		0030	11	0.	*	1		0415	86	265.	*	1		0800	161	0.	*	1		1145	236	0.
1		0033	12	0.	*	1		0418	87	250.	*	1		0803	162	0.	*	1		1148	237	0.
1		0036	13	0.	*	1		0421	88	220.	*	1		0806	163	0.	*	1		1151	238	0.
1		0039	14	0.	*	1		0424	89	167.	*	1		0809	164	0.	*	1		1154	239	0.
1		0042	15	0.	*	1		0427	90	120.	*	1		0812	165	0.	*	1		1157	240	0.
1		0045	16	0.	*	1		0430	91	74.	*	1		0815	166	0.	*	1		1200	241	0.
1		0048	17	0.	*	1		0433	92	28.	*	1		0818	167	0.	*	1		1203	242	0.
1		0051	18	0.	*	1		0436	93	0.	*	1		0821	168	0.	*	1		1206	243	0.
1		0054	19	0.	*	1		0439	94	0.	*	1		0824	169	0.	*	1		1209	244	0.
1		0057	20	0.	*	1		0442	95	0.	*	1		0827	170	0.	*	1		1212	245	0.
1		0100	21	0.	*	1		0445	96	0.	*	1		0830	171	0.	*	1		1215	246	0.
1		0103	22	0.	*	1		0448	97	0.	*	1		0833	172	0.	*	1		1218	247	0.
1		0106	23	0.	*	1		0451	98	0.	*	1		0836	173	0.	*	1		1221	248	0.
1		0109	24	0.	*	1		0454	99	0.	*	1		0839	174	0.	*	1		1224	249	0.
1		0112	25	0.	*	1		0457	100	0.	*	1		0842	175	0.	*	1		1227	250	0.
1		0115	26	0.	*	1		0500	101	0.	*	1		0845	176	0.	*	1		1230	251	0.
1		0118	27	0.	*	1		0503	102	0.	*	1		0848	177	0.	*	1		1233	252	0.
1		0121	28	0.	*	1		0506	103	0.	*	1		0851	178	0.	*	1		1236	253	0.
1		0124	29	0.	*	1		0509	104	0.	*	1		0854	179	0.	*	1		1239	254	0.
1		0127	30	0.	*	1		0512	105	0.	*	1		0857	180	0.	*	1		1242	255	0.
1		0130	31	0.	*	1		0515	106	0.	*	1		0900	181	0.	*	1		1245	256	0.
1		0133	32	0.	*	1		0518	107	0.	*	1		0903	182	0.	*	1		1248	257	0.
1		0136	33	0.	*	1		0521	108	0.	*	1		0906	183	0.	*	1		1251	258	0.
1		0139	34	0.	*	1		0524	109	0.	*	1		0909	184	0.	*	1		1254	259	0.
1		0142	35	0.	*	1		0527	110	0.	*	1		0912	185	0.	*	1		1257	260	0.
1		0145	36	0.	*	1		0530	111	0.	*	1		0915	186	0.	*	1		1300	261	0.
1		0148	37	0.	*	1		0533	112	0.	*	1		0918	187	0.	*	1		1303	262	0.
1		0151	38	0.	*	1		0536	113	0.	*	1		0921	188	0.	*	1		1306	263	0.
1		0154	39	0.	*	1		0539	114	0.	*	1		0924	189	0.	*	1		1309	264	0.
1		0157	40	0.	*	1		0542	115	0.	*	1		0927	190	0.	*	1		1312	265	0.
1		0200	41	0.	*	1		0545	116	0.	*	1		0930	191	0.	*	1		1315	266	0.
1		0203	42	0.	*	1		0548	117	0.	*	1		0933	192	0.	*	1		1318	267	0.
1		0206	43	0.	*	1		0551	118	0.	*	1		0936	193	0.	*	1		1321	268	0.
1		0209	44	0.	*	1		0554	119	0.	*	1		0939	194	0.	*	1		1324	269	0.
1		0212	45	0.	*	1		0557	120	0.	*	1		0942	195	0.	*	1		1327	270	0.
1		0215	46	0.	*	1		0600	121	0.	*	1		0945	196	0.	*	1		1330	271	0.
1		0218	47	0.	*	1		0603	122	0.	*	1		0948	197	0.	*	1		1333	272	0.
1		0221	48	0.	*	1		0606	123	0.	*	1		0951	198	0.	*	1		1336	273	0.
1		0224	49	0.	*	1		0609	124	0.	*	1		0954	199	0.	*	1		1339	274	0.
1		0227	50	0.	*	1		0612	125	0.	*	1		0957	200	0.	*	1		1342	275	0.
1		0230	51	0.	*	1		0615	126	0.	*	1		1000	201	0.	*	1		1345	276	0.
1		0233	52	0.	*	1		0618	127	0.	*	1		1003	202	0.	*	1		1348	277	0.
1		0236	53	0.	*	1		0621	128	0.	*	1		1006	203	0.	*	1		1351	278	0.
1		0239	54	0.	*	1		0624	129	0.	*	1		1009	204	0.	*	1		1354	279	0.
1		0242	55	0.	*	1		0627	130	0.	*	1		1012	205	0.	*	1		1357	280	0.
1		0245	56	0.	*	1		0630	131	0.	*	1		1015	206	0.	*	1		1400	281	0.
1		0248	57	0.	*	1		0633	132	0.	*	1		1018	207	0.	*	1		1403	282	0.
1		0251	58	0.	*	1		0636	133	0.	*	1		1021	208	0.	*	1		1406	283	0.
1		0254	59	0.	*	1		0639	134	0.	*	1		1024	209	0.	*	1		1409	284	0.
1		0257	60	0.	*	1		0642	135	0.	*	1		1027	210	0.	*	1		1412	285	0.
1		0300	61	0.	*	1		0645	136	0.	*	1		1030	211	0.	*	1		1415	286	0.
1		0303	62	0.	*	1		0648	137	0.	*	1		1033	212	0.	*	1		1418	287	0.

1	0306	63	0.	*	1	0651	138	0.	*	1	1036	213	0.	*	1	1421	288	0.
1	0309	64	0.	*	1	0654	139	0.	*	1	1039	214	0.	*	1	1424	289	0.
1	0312	65	0.	*	1	0657	140	0.	*	1	1042	215	0.	*	1	1427	290	0.
1	0315	66	0.	*	1	0700	141	0.	*	1	1045	216	0.	*	1	1430	291	0.
1	0318	67	0.	*	1	0703	142	0.	*	1	1048	217	0.	*	1	1433	292	0.
1	0321	68	0.	*	1	0706	143	0.	*	1	1051	218	0.	*	1	1436	293	0.
1	0324	69	0.	*	1	0709	144	0.	*	1	1054	219	0.	*	1	1439	294	0.
1	0327	70	0.	*	1	0712	145	0.	*	1	1057	220	0.	*	1	1442	295	0.
1	0330	71	0.	*	1	0715	146	0.	*	1	1100	221	0.	*	1	1445	296	0.
1	0333	72	0.	*	1	0718	147	0.	*	1	1103	222	0.	*	1	1448	297	0.
1	0336	73	0.	*	1	0721	148	0.	*	1	1106	223	0.	*	1	1451	298	0.
1	0339	74	0.	*	1	0724	149	0.	*	1	1109	224	0.	*	1	1454	299	0.
1	0342	75	0.	*	1	0727	150	0.	*	1	1112	225	0.	*	1	1457	300	0.
				*					*					*				

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	14.95-HR
+ (CFS)	(HR)					
		(CFS)				
+ 265.	4.20		20.	8.	8.	8.
		(INCHES)	.382	.382	.382	.382
		(AC-FT)	10.	10.	10.	10.

CUMULATIVE AREA = .47 SQ MI

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HYDROGRAPH AT STATION DIV1P

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DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0345	76	211.	*	1		0730	151	0.	*	1		1115	226	0.
1		0003	2	0.	*	1		0348	77	257.	*	1		0733	152	0.	*	1		1118	227	0.
1		0006	3	0.	*	1		0351	78	316.	*	1		0736	153	0.	*	1		1121	228	0.
1		0009	4	0.	*	1		0354	79	350.	*	1		0739	154	0.	*	1		1124	229	0.
1		0012	5	0.	*	1		0357	80	350.	*	1		0742	155	0.	*	1		1127	230	0.
1		0015	6	0.	*	1		0400	81	350.	*	1		0745	156	0.	*	1		1130	231	0.
1		0018	7	0.	*	1		0403	82	350.	*	1		0748	157	0.	*	1		1133	232	0.
1		0021	8	0.	*	1		0406	83	350.	*	1		0751	158	0.	*	1		1136	233	0.
1		0024	9	0.	*	1		0409	84	350.	*	1		0754	159	0.	*	1		1139	234	0.
1		0027	10	0.	*	1		0412	85	350.	*	1		0757	160	0.	*	1		1142	235	0.
1		0030	11	0.	*	1		0415	86	350.	*	1		0800	161	0.	*	1		1145	236	0.
1		0033	12	0.	*	1		0418	87	350.	*	1		0803	162	0.	*	1		1148	237	0.
1		0036	13	0.	*	1		0421	88	350.	*	1		0806	163	0.	*	1		1151	238	0.
1		0039	14	0.	*	1		0424	89	350.	*	1		0809	164	0.	*	1		1154	239	0.
1		0042	15	0.	*	1		0427	90	350.	*	1		0812	165	0.	*	1		1157	240	0.
1		0045	16	0.	*	1		0430	91	350.	*	1		0815	166	0.	*	1		1200	241	0.
1		0048	17	0.	*	1		0433	92	350.	*	1		0818	167	0.	*	1		1203	242	0.
1		0051	18	0.	*	1		0436	93	328.	*	1		0821	168	0.	*	1		1206	243	0.
1		0054	19	0.	*	1		0439	94	272.	*	1		0824	169	0.	*	1		1209	244	0.
1		0057	20	0.	*	1		0442	95	231.	*	1		0827	170	0.	*	1		1212	245	0.
1		0100	21	0.	*	1		0445	96	195.	*	1		0830	171	0.	*	1		1215	246	0.
1		0103	22	0.	*	1		0448	97	165.	*	1		0833	172	0.	*	1		1218	247	0.
1		0106	23	0.	*	1		0451	98	138.	*	1		0836	173	0.	*	1		1221	248	0.
1		0109	24	0.	*	1		0454	99	114.	*	1		0839	174	0.	*	1		1224	249	0.
1		0112	25	0.	*	1		0457	100	97.	*	1		0842	175	0.	*	1		1227	250	0.
1		0115	26	0.	*	1		0500	101	82.	*	1		0845	176	0.	*	1		1230	251	0.
1		0118	27	0.	*	1		0503	102	68.	*	1		0848	177	0.	*	1		1233	252	0.
1		0121	28	0.	*	1		0506	103	56.	*	1		0851	178	0.	*	1		1236	253	0.
1		0124	29	0.	*	1		0509	104	46.	*	1		0854	179	0.	*	1		1239	254	0.
1		0127	30	0.	*	1		0512	105	39.	*	1		0857	180	0.	*	1		1242	255	0.
1		0130	31	0.	*	1		0515	106	34.	*	1		0900	181	0.	*	1		1245	256	0.
1		0133	32	0.	*	1		0518	107	29.	*	1		0903	182	0.	*	1		1248	257	0.
1		0136	33	0.	*	1		0521	108	25.	*	1		0906	183	0.	*	1		1251	258	0.
1		0139	34	0.	*	1		0524	109	24.	*	1		0909	184	0.	*	1		1254	259	0.
1		0142	35	0.	*	1		0527	110	22.	*	1		0912	185	0.	*	1		1257	260	0.
1		0145	36	0.	*	1		0530	111	22.	*	1		0915	186	0.	*	1		1300	261	0.
1		0148	37	0.	*	1		0533	112	21.	*	1		0918	187	0.	*	1		1303	262	0.
1		0151	38	0.	*	1		0536	113	20.	*	1		0921	188	0.	*	1		1306	263	0.
1		0154	39	0.	*	1		0539	114	20.	*	1		0924	189	0.	*	1		1309	264	0.
1		0157	40	0.	*	1		0542	115	20.	*	1		0927	190	0.	*	1		1312	265	0.
1		0200	41	0.	*	1		0545	116	19.	*	1		0930	191	0.	*	1		1315	266	0.
1		0203	42	0.	*	1		0548	117	19.	*	1		0933	192	0.	*	1		1318	267	0.
1		0206	43	0.	*	1		0551	118	19.	*	1		0936	193	0.	*	1		1321	268	0.
1		0209	44	0.	*	1		0554	119	19.	*	1		0939	194	0.	*	1		1324	269	0.
1		0212	45	0.	*	1		0557	120	19.	*	1		0942	195	0.	*	1		1327	270	0.
1		0215	46	0.	*	1		0600	121	19.	*	1		0945	196	0.	*	1		1330	271	0.
1		0218	47	0.	*	1		0603	122	19.	*	1		0948	197	0.	*	1		1333	272	0.
1		0221	48	3.	*	1		0606	123	19.	*	1		0951	198	0.	*	1		1336	273	0.
1		0224	49	13.	*	1		0609	124	18.	*	1		0954	199	0.	*	1		1339	274	0.

1	0227	50	14.	*	1	0612	125	17.	*	1	0957	200	0.	*	1	1342	275	0.
1	0230	51	14.	*	1	0615	126	15.	*	1	1000	201	0.	*	1	1345	276	0.
1	0233	52	15.	*	1	0618	127	13.	*	1	1003	202	0.	*	1	1348	277	0.
1	0236	53	15.	*	1	0621	128	11.	*	1	1006	203	0.	*	1	1351	278	0.
1	0239	54	16.	*	1	0624	129	9.	*	1	1009	204	0.	*	1	1354	279	0.
1	0242	55	16.	*	1	0627	130	6.	*	1	1012	205	0.	*	1	1357	280	0.
1	0245	56	17.	*	1	0630	131	5.	*	1	1015	206	0.	*	1	1400	281	0.
1	0248	57	17.	*	1	0633	132	3.	*	1	1018	207	0.	*	1	1403	282	0.
1	0251	58	18.	*	1	0636	133	2.	*	1	1021	208	0.	*	1	1406	283	0.
1	0254	59	19.	*	1	0639	134	2.	*	1	1024	209	0.	*	1	1409	284	0.
1	0257	60	20.	*	1	0642	135	1.	*	1	1027	210	0.	*	1	1412	285	0.
1	0300	61	21.	*	1	0645	136	1.	*	1	1030	211	0.	*	1	1415	286	0.
1	0303	62	23.	*	1	0648	137	1.	*	1	1033	212	0.	*	1	1418	287	0.
1	0306	63	25.	*	1	0651	138	0.	*	1	1036	213	0.	*	1	1421	288	0.
1	0309	64	28.	*	1	0654	139	0.	*	1	1039	214	0.	*	1	1424	289	0.
1	0312	65	32.	*	1	0657	140	0.	*	1	1042	215	0.	*	1	1427	290	0.
1	0315	66	35.	*	1	0700	141	0.	*	1	1045	216	0.	*	1	1430	291	0.
1	0318	67	40.	*	1	0703	142	0.	*	1	1048	217	0.	*	1	1433	292	0.
1	0321	68	46.	*	1	0706	143	0.	*	1	1051	218	0.	*	1	1436	293	0.
1	0324	69	54.	*	1	0709	144	0.	*	1	1054	219	0.	*	1	1439	294	0.
1	0327	70	63.	*	1	0712	145	0.	*	1	1057	220	0.	*	1	1442	295	0.
1	0330	71	72.	*	1	0715	146	0.	*	1	1100	221	0.	*	1	1445	296	0.
1	0333	72	87.	*	1	0718	147	0.	*	1	1103	222	0.	*	1	1448	297	0.
1	0336	73	106.	*	1	0721	148	0.	*	1	1106	223	0.	*	1	1451	298	0.
1	0339	74	137.	*	1	0724	149	0.	*	1	1109	224	0.	*	1	1454	299	0.
1	0342	75	172.	*	1	0727	150	0.	*	1	1112	225	0.	*	1	1457	300	0.
				*					*					*				

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	14.95-HR
+		(CFS)				
+ 350.	3.90		76.	31.	31.	31.
		(INCHES)	1.492	1.492	1.492	1.492
		(AC-FT)	38.	38.	38.	38.

CUMULATIVE AREA = .47 SQ MI

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              **************
              *            *
271 KK        *   SITE2A   *        DETENTION BASIN AT SITE 2A **************************
              *            *
              **************

275 KO            OUTPUT CONTROL VARIABLES
                        IPRNT          1  PRINT CONTROL
                        IPLOT          2  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE

                HYDROGRAPH ROUTING DATA

276 RS            STORAGE ROUTING
                        NSTPS          1  NUMBER OF SUBREACHES
                         ITYP       STOR  TYPE OF INITIAL CONDITION
                       RSVRIC        .00  INITIAL CONDITION
                            X        .00 WORKING R AND D COEFFICIENT

277 SV              STORAGE         .0       1.8       3.7       6.0       8.7      11.8      15.3      19.4      23.9

278 SE            ELEVATION    1247.30   1250.00   1252.00   1254.00   1256.00   1258.00   1260.00   1262.00   1264.00

279 SQ            DISCHARGE         0.       14.       22.       37.       46.       57.       66.       88.      160.      297.
                                   524.      619.      699.      801.

281 SE            ELEVATION    1247.30   1248.70   1249.12   1250.19   1251.54   1253.55   1255.48   1256.17   1256.67   1257.25
                               1258.00   1259.02   1260.37   1263.15

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COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.93	1.21	1.80	1.98	3.26	3.70	5.48	6.00	8.00
OUTFLOW	.00	14.10	21.60	34.51	37.30	46.10	48.53	56.70	58.82	65.80
ELEVATION	1247.30	1248.70	1249.12	1250.00	1250.19	1251.54	1252.00	1253.55	1254.00	1255.48
STORAGE	8.70	8.96	9.74	10.64	11.80	13.59	15.30	16.06	19.40	21.99
OUTFLOW	82.15	87.50	160.10	296.50	523.60	619.20	676.77	698.50	758.60	801.00

ELEVATION	1256.00	1256.17	1256.67	1257.25	1258.00	1259.02	1260.00	1260.37	1262.00	1263.15

STORAGE	23.90
OUTFLOW	832.34
ELEVATION	1264.00

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HYDROGRAPH AT STATION SITE2A

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	1247.3	*	1		0500	101	564.	12.6	1258.4	*	1		1000	201	1.	.1	1247.4
1		0003	2	0.	.0	1247.3	*	1		0503	102	397.	11.2	1257.6	*	1		1003	202	1.	.0	1247.4
1		0006	3	0.	.0	1247.3	*	1		0506	103	236.	10.2	1257.0	*	1		1006	203	1.	.0	1247.4
1		0009	4	0.	.0	1247.3	*	1		0509	104	155.	9.7	1256.6	*	1		1009	204	1.	.0	1247.4
1		0012	5	0.	.0	1247.3	*	1		0512	105	118.	9.3	1256.4	*	1		1012	205	1.	.0	1247.4
1		0015	6	0.	.0	1247.3	*	1		0515	106	92.	9.0	1256.2	*	1		1015	206	1.	.0	1247.4
1		0018	7	0.	.0	1247.3	*	1		0518	107	84.	8.8	1256.1	*	1		1018	207	1.	.0	1247.4
1		0021	8	0.	.0	1247.3	*	1		0521	108	79.	8.6	1255.9	*	1		1021	208	1.	.0	1247.4
1		0024	9	0.	.0	1247.3	*	1		0524	109	74.	8.3	1255.7	*	1		1024	209	0.	.0	1247.3
1		0027	10	0.	.0	1247.3	*	1		0527	110	69.	8.1	1255.6	*	1		1027	210	0.	.0	1247.3
1		0030	11	0.	.0	1247.3	*	1		0530	111	66.	8.0	1255.4	*	1		1030	211	0.	.0	1247.3
1		0033	12	0.	.0	1247.3	*	1		0533	112	65.	7.8	1255.3	*	1		1033	212	0.	.0	1247.3
1		0036	13	0.	.0	1247.3	*	1		0536	113	64.	7.6	1255.2	*	1		1036	213	0.	.0	1247.3
1		0039	14	0.	.0	1247.3	*	1		0539	114	64.	7.4	1255.0	*	1		1039	214	0.	.0	1247.3
1		0042	15	0.	.0	1247.3	*	1		0542	115	63.	7.2	1254.9	*	1		1042	215	0.	.0	1247.3
1		0045	16	0.	.0	1247.3	*	1		0545	116	62.	7.0	1254.8	*	1		1045	216	0.	.0	1247.3
1		0048	17	0.	.0	1247.3	*	1		0548	117	62.	6.9	1254.6	*	1		1048	217	0.	.0	1247.3
1		0051	18	0.	.0	1247.3	*	1		0551	118	61.	6.7	1254.5	*	1		1051	218	0.	.0	1247.3
1		0054	19	0.	.0	1247.3	*	1		0554	119	61.	6.5	1254.4	*	1		1054	219	0.	.0	1247.3
1		0057	20	0.	.0	1247.3	*	1		0557	120	60.	6.4	1254.3	*	1		1057	220	0.	.0	1247.3
1		0100	21	0.	.0	1247.3	*	1		0600	121	59.	6.2	1254.1	*	1		1100	221	0.	.0	1247.3
1		0103	22	0.	.0	1247.3	*	1		0603	122	59.	6.0	1254.0	*	1		1103	222	0.	.0	1247.3
1		0106	23	0.	.0	1247.3	*	1		0606	123	58.	5.9	1253.9	*	1		1106	223	0.	.0	1247.3
1		0109	24	0.	.0	1247.3	*	1		0609	124	58.	5.7	1253.7	*	1		1109	224	0.	.0	1247.3
1		0112	25	0.	.0	1247.3	*	1		0612	125	57.	5.5	1253.6	*	1		1112	225	0.	.0	1247.3
1		0115	26	0.	.0	1247.3	*	1		0615	126	56.	5.4	1253.4	*	1		1115	226	0.	.0	1247.3
1		0118	27	0.	.0	1247.3	*	1		0618	127	55.	5.2	1253.3	*	1		1118	227	0.	.0	1247.3
1		0121	28	0.	.0	1247.3	*	1		0621	128	55.	5.0	1253.1	*	1		1121	228	0.	.0	1247.3
1		0124	29	0.	.0	1247.3	*	1		0624	129	54.	4.8	1253.0	*	1		1124	229	0.	.0	1247.3
1		0127	30	0.	.0	1247.3	*	1		0627	130	53.	4.6	1252.8	*	1		1127	230	0.	.0	1247.3
1		0130	31	0.	.0	1247.3	*	1		0630	131	52.	4.4	1252.6	*	1		1130	231	0.	.0	1247.3
1		0133	32	0.	.0	1247.3	*	1		0633	132	51.	4.2	1252.5	*	1		1133	232	0.	.0	1247.3
1		0136	33	0.	.0	1247.3	*	1		0636	133	50.	4.1	1252.3	*	1		1136	233	0.	.0	1247.3
1		0139	34	0.	.0	1247.3	*	1		0639	134	49.	3.9	1252.1	*	1		1139	234	0.	.0	1247.3
1		0142	35	0.	.0	1247.3	*	1		0642	135	48.	3.7	1252.0	*	1		1142	235	0.	.0	1247.3
1		0145	36	0.	.0	1247.3	*	1		0645	136	47.	3.5	1251.8	*	1		1145	236	0.	.0	1247.3
1		0148	37	0.	.0	1247.3	*	1		0648	137	46.	3.3	1251.6	*	1		1148	237	0.	.0	1247.3
1		0151	38	0.	.0	1247.3	*	1		0651	138	45.	3.1	1251.4	*	1		1151	238	0.	.0	1247.3
1		0154	39	0.	.0	1247.3	*	1		0654	139	44.	2.9	1251.2	*	1		1154	239	0.	.0	1247.3
1		0157	40	0.	.0	1247.3	*	1		0657	140	42.	2.7	1251.0	*	1		1157	240	0.	.0	1247.3
1		0200	41	0.	.0	1247.3	*	1		0700	141	41.	2.6	1250.8	*	1		1200	241	0.	.0	1247.3
1		0203	42	0.	.0	1247.3	*	1		0703	142	40.	2.4	1250.6	*	1		1203	242	0.	.0	1247.3
1		0206	43	0.	.0	1247.3	*	1		0706	143	39.	2.2	1250.5	*	1		1206	243	0.	.0	1247.3
1		0209	44	0.	.0	1247.3	*	1		0709	144	38.	2.1	1250.3	*	1		1209	244	0.	.0	1247.3
1		0212	45	0.	.0	1247.3	*	1		0712	145	36.	1.9	1250.1	*	1		1212	245	0.	.0	1247.3
1		0215	46	0.	.0	1247.3	*	1		0715	146	34.	1.8	1250.0	*	1		1215	246	0.	.0	1247.3
1		0218	47	0.	.0	1247.3	*	1		0718	147	31.	1.6	1249.8	*	1		1218	247	0.	.0	1247.3
1		0221	48	0.	.0	1247.3	*	1		0721	148	28.	1.5	1249.6	*	1		1221	248	0.	.0	1247.3
1		0224	49	1.	.0	1247.4	*	1		0724	149	26.	1.4	1249.4	*	1		1224	249	0.	.0	1247.3
1		0227	50	1.	.1	1247.4	*	1		0727	150	24.	1.3	1249.3	*	1		1227	250	0.	.0	1247.3
1		0230	51	2.	.1	1247.5	*	1		0730	151	21.	1.2	1249.1	*	1		1230	251	0.	.0	1247.3
1		0233	52	3.	.2	1247.6	*	1		0733	152	19.	1.1	1249.0	*	1		1233	252	0.	.0	1247.3
1		0236	53	4.	.2	1247.7	*	1		0736	153	17.	1.0	1248.9	*	1		1236	253	0.	.0	1247.3
1		0239	54	4.	.3	1247.7	*	1		0739	154	15.	1.0	1248.8	*	1		1239	254	0.	.0	1247.3
1		0242	55	5.	.3	1247.8	*	1		0742	155	14.	.9	1248.7	*	1		1242	255	0.	.0	1247.3
1		0245	56	6.	.4	1247.9	*	1		0745	156	13.	.9	1248.6	*	1		1245	256	0.	.0	1247.3
1		0248	57	6.	.4	1247.9	*	1		0748	157	12.	.8	1248.5	*	1		1248	257	0.	.0	1247.3
1		0251	58	7.	.5	1248.0	*	1		0751	158	12.	.8	1248.4	*	1		1251	258	0.	.0	1247.3
1		0254	59	8.	.5	1248.1	*	1		0754	159	11.	.7	1248.4	*	1		1254	259	0.	.0	1247.3
1		0257	60	8.	.6	1248.1	*	1		0757	160	10.	.7	1248.3	*	1		1257	260	0.	.0	1247.3
1		0300	61	9.	.6	1248.2	*	1		0800	161	10.	.6	1248.2	*	1		1300	261	0.	.0	1247.3
1		0303	62	10.	.7	1248.3	*	1		0803	162	9.	.6	1248.2	*	1		1303	262	0.	.0	1247.3
1		0306	63	11.	.7	1248.4	*	1		0806	163	8.	.6	1248.1	*	1		1306	263	0.	.0	1247.3
1		0309	64	12.	.8	1248.5	*	1		0809	164	8.	.5	1248.1	*	1		1309	264	0.	.0	1247.3
1		0312	65	13.	.9	1248.6	*	1		0812	165	7.	.5	1248.0	*	1		1312	265	0.	.0	1247.3
1		0315	66	14.	.9	1248.7	*	1		0815	166	7.	.5	1248.0	*	1		1315	266	0.	.0	1247.3
1		0318	67	17.	1.0	1248.8	*	1		0818	167	7.	.4	1248.0	*	1		1318	267	0.	.0	1247.3
1		0321	68	19.	1.1	1249.0	*	1		0821	168	6.	.4	1247.9	*	1		1321	268	0.	.0	1247.3
1		0324	69	22.	1.2	1249.2	*	1		0824	169	6.	.4	1247.9	*	1		1324	269	0.	.0	1247.3
1		0327	70	26.	1.4	1249.4	*	1		0827	170	5.	.4	1247.8	*	1		1327	270	0.	.0	1247.3

1	0330	71	29.	1.6	1249.6	*	1	0830	171	5.	.3	1247.8	*	1	1330	271	0.	.0	1247.3
1	0333	72	34.	1.8	1249.9	*	1	0833	172	5.	.3	1247.8	*	1	1333	272	0.	.0	1247.3
1	0336	73	37.	2.0	1250.2	*	1	0836	173	5.	.3	1247.7	*	1	1336	273	0.	.0	1247.3
1	0339	74	40.	2.4	1250.6	*	1	0839	174	4.	.3	1247.7	*	1	1339	274	0.	.0	1247.3
1	0342	75	43.	2.8	1251.1	*	1	0842	175	4.	.3	1247.7	*	1	1342	275	0.	.0	1247.3
1	0345	76	47.	3.5	1251.8	*	1	0845	176	4.	.2	1247.7	*	1	1345	276	0.	.0	1247.3
1	0348	77	52.	4.5	1252.7	*	1	0848	177	4.	.2	1247.6	*	1	1348	277	0.	.0	1247.3
1	0351	78	59.	6.1	1254.0	*	1	0851	178	3.	.2	1247.6	*	1	1351	278	0.	.0	1247.3
1	0354	79	72.	8.3	1255.7	*	1	0854	179	3.	.2	1247.6	*	1	1354	279	0.	.0	1247.3
1	0357	80	290.	10.6	1257.2	*	1	0857	180	3.	.2	1247.6	*	1	1357	280	0.	.0	1247.3
1	0400	81	553.	12.3	1258.3	*	1	0900	181	3.	.2	1247.6	*	1	1400	281	0.	.0	1247.3
1	0403	82	623.	13.7	1259.1	*	1	0903	182	3.	.2	1247.6	*	1	1403	282	0.	.0	1247.3
1	0406	83	668.	15.0	1259.8	*	1	0906	183	2.	.2	1247.5	*	1	1406	283	0.	.0	1247.3
1	0409	84	703.	16.3	1260.5	*	1	0909	184	2.	.2	1247.5	*	1	1409	284	0.	.0	1247.3
1	0412	85	725.	17.5	1261.1	*	1	0912	185	2.	.1	1247.5	*	1	1412	285	0.	.0	1247.3
1	0415	86	745.	18.7	1261.6	*	1	0915	186	2.	.1	1247.5	*	1	1415	286	0.	.0	1247.3
1	0418	87	763.	19.7	1262.1	*	1	0918	187	2.	.1	1247.5	*	1	1418	287	0.	.0	1247.3
1	0421	88	777.	20.5	1262.5	*	1	0921	188	2.	.1	1247.5	*	1	1421	288	0.	.0	1247.3
1	0424	89	789.	21.2	1262.8	*	1	0924	189	2.	.1	1247.5	*	1	1424	289	0.	.0	1247.3
1	0427	90	797.	21.8	1263.1	*	1	0927	190	2.	.1	1247.5	*	1	1427	290	0.	.0	1247.3
1	0430	91	803.	22.1	1263.2	*	1	0930	191	1.	.1	1247.4	*	1	1430	291	0.	.0	1247.3
1	0433	92	806.	22.3	1263.3	*	1	0933	192	1.	.1	1247.4	*	1	1433	292	0.	.0	1247.3
1	0436	93	806.	22.3	1263.3	*	1	0936	193	1.	.1	1247.4	*	1	1436	293	0.	.0	1247.3
1	0439	94	801.	22.0	1263.1	*	1	0939	194	1.	.1	1247.4	*	1	1439	294	0.	.0	1247.3
1	0442	95	790.	21.3	1262.8	*	1	0942	195	1.	.1	1247.4	*	1	1442	295	0.	.0	1247.3
1	0445	96	774.	20.3	1262.4	*	1	0945	196	1.	.1	1247.4	*	1	1445	296	0.	.0	1247.3
1	0448	97	753.	19.1	1261.9	*	1	0948	197	1.	.1	1247.4	*	1	1448	297	0.	.0	1247.3
1	0451	98	727.	17.7	1261.1	*	1	0951	198	1.	.1	1247.4	*	1	1451	298	0.	.0	1247.3
1	0454	99	697.	16.0	1260.3	*	1	0954	199	1.	.1	1247.4	*	1	1454	299	0.	.0	1247.3
1	0457	100	642.	14.3	1259.4	*	1	0957	200	1.	.1	1247.4	*	1	1457	300	0.	.0	1247.3
						*							*						

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	14.95-HR
+		(CFS)				
+ 806.	4.55		165.	66.	66.	66.
		(INCHES)	3.221	3.234	3.234	3.234
		(AC-FT)	82.	82.	82.	82.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	14.95-HR
+ 22.	4.55	6.	2.	2.	2.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	14.95-HR
+ 1263.29	4.55	1252.96	1249.60	1249.60	1249.60

CUMULATIVE AREA = .47 SQ MI

1 STATION SITE2A

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                    (I) INFLOW,   (O) OUTFLOW
        0.     200.     400.     600.     800.    1000.    1200.       0.       0.       0.       0.       0.       0.
                                                                      (S) STORAGE
        0.       0.       0.       0.       0.       0.       0.      10.      20.      30.       0.       0.       0.
DAHRMN PER
 10000   1I---------.---------.---------.---------.---------.---------S---------.---------.---------.---------.---------.---------.
 10003   2I         .         .         .         .         .         S         .         .         .         .         .         .
 10006   3I         .         .         .         .         .         S         .         .         .         .         .         .
 10009   4I         .         .         .         .         .         S         .         .         .         .         .         .
 10012   5I         .         .         .         .         .         S         .         .         .         .         .         .
 10015   6I         .         .         .         .         .         S         .         .         .         .         .         .
 10018   7I         .         .         .         .         .         S         .         .         .         .         .         .
 10021   8I         .         .         .         .         .         S         .         .         .         .         .         .
 10024   9I         .         .         .         .         .         S         .         .         .         .         .         .
 10027  10I         .         .         .         .         .         S         .         .         .         .         .         .
 10030  11I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
 10033  12I         .         .         .         .         .         S         .         .         .         .         .         .
 10036  13I         .         .         .         .         .         S         .         .         .         .         .         .
 10039  14I         .         .         .         .         .         S         .         .         .         .         .         .
 10042  15I         .         .         .         .         .         S         .         .         .         .         .         .
 10045  16I         .         .         .         .         .         S         .         .         .         .         .         .
 10048  17I         .         .         .         .         .         S         .         .         .         .         .         .
 10051  18I         .         .         .         .         .         S         .         .         .         .         .         .
 10054  19I         .         .         .         .         .         S         .         .         .         .         .         .
 10057  20I         .         .         .         .         .         S         .         .         .         .         .         .
 10100  21I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
 10103  22I         .         .         .         .         .         S         .         .         .         .         .         .
 10106  23I         .         .         .         .         .         S         .         .         .         .         .         .
 10109  24I         .         .         .         .         .         S         .         .         .         .         .         .
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10112  25I         .         .         .         .         .         S         .         .         .         .         .         .
10115  26I         .         .         .         .         .         S         .         .         .         .         .         .
10118  27I         .         .         .         .         .         S         .         .         .         .         .         .
10121  28I         .         .         .         .         .         S         .         .         .         .         .         .
10124  29I         .         .         .         .         .         S         .         .         .         .         .         .
10127  30I         .         .         .         .         .         S         .         .         .         .         .         .
10130  31I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
10133  32I         .         .         .         .         .         S         .         .         .         .         .         .
10136  33I         .         .         .         .         .         S         .         .         .         .         .         .
10139  34I         .         .         .         .         .         S         .         .         .         .         .         .
10142  35I         .         .         .         .         .         S         .         .         .         .         .         .
10145  36I         .         .         .         .         .         S         .         .         .         .         .         .
10148  37I         .         .         .         .         .         S         .         .         .         .         .         .
10151  38I         .         .         .         .         .         S         .         .         .         .         .         .
10154  39I         .         .         .         .         .         S         .         .         .         .         .         .
10157  40I         .         .         .         .         .         S         .         .         .         .         .         .
10200  41I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
10203  42I         .         .         .         .         .         S         .         .         .         .         .         .
10206  43I         .         .         .         .         .         S         .         .         .         .         .         .
10209  44I         .         .         .         .         .         S         .         .         .         .         .         .
10212  45I         .         .         .         .         .         S         .         .         .         .         .         .
10215  46I         .         .         .         .         .         S         .         .         .         .         .         .
10218  47I         .         .         .         .         .         S         .         .         .         .         .         .
10221  48I         .         .         .         .         .         S         .         .         .         .         .         .
10224  49OI        .         .         .         .         .         S         .         .         .         .         .         .
10227  50OI        .         .         .         .         .         S         .         .         .         .         .         .
10230  51OI. . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
10233  52OI        .         .         .         .         .         S         .         .         .         .         .         .
10236  53OI        .         .         .         .         .         S         .         .         .         .         .         .
10239  54OI        .         .         .         .         .         S         .         .         .         .         .         .
10242  55OI        .         .         .         .         .         S         .         .         .         .         .         .
10245  56OI        .         .         .         .         .         S         .         .         .         .         .         .
10248  57OI        .         .         .         .         .         S         .         .         .         .         .         .
10251  58OI        .         .         .         .         .         S         .         .         .         .         .         .
10254  59OI        .         .         .         .         .         .S        .         .         .         .         .
10257  60OI        .         .         .         .         .         .S        .         .         .         .         .
10300  61OI. . . . . . . . . . . . . . . . . . . . . . . . . . . . .S. . . . . . . . . . . . . . . . . . . . . . . . . . . . .
10303  62.I        .         .         .         .         .         .S        .         .         .         .         .
10306  63.I        .         .         .         .         .         .S        .         .         .         .         .
10309  64.I        .         .         .         .         .         .S        .         .         .         .         .
10312  65.OI       .         .         .         .         .         .S        .         .         .         .         .
10315  66.OI       .         .         .         .         .         .S        .         .         .         .         .
10318  67.OI       .         .         .         .         .         .S        .         .         .         .         .
10321  68.OI       .         .         .         .         .         .S        .         .         .         .         .
10324  69.O I      .         .         .         .         .         .S        .         .         .         .         .
10327  70.O I      .         .         .         .         .         .S        .         .         .         .         .
10330  71.O. I . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . .
10333  72. O I     .         .         .         .         .         . S       .         .         .         .         .
10336  73. O  I    .         .         .         .         .         . S       .         .         .         .         .
10339  74. O    I  .         .         .         .         .         . S       .         .         .         .         .
10342  75. O      I.         .         .         .         .         .  S      .         .         .         .         .
10345  76. O       . I       .         .         .         .         .  S      .         .         .         .         .
10348  77.  O      .       I .         .         .         .         .   S     .         .         .         .         .
10351  78.  O      .         .     I   .         .         .         .     S   .         .         .         .         .
10354  79.   O     .         .         .   I     .         .         .       S .         .         .         .         .
10357  80.         .    O    .         .         I         .         .         .S        .         .         .         .
10400  81. . . . . . . . . . . . . . O . . . . . . . I . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . .
10403  82.         .         .         .O      I  .         .         .   S     .         .         .         .
10406  83.         .         .         .  O      I.         .         .    S    .         .         .         .
10409  84.         .         .         .    O             I         .         .     S   .         .         .         .
10412  85.         .         .         .     O   .         .I        .         .       S .         .         .         .
10415  86.         .         .         .      O  .         I         .         .        S.         .         .         .
10418  87.         .         .         .       O .         I         .         .         S         .         .         .
10421  88.         .         .         .        O.       I .         .         .         .S        .         .         .
10424  89.         .         .         .        O.      I  .         .         .         .S        .         .         .
10427  90.         .         .         .         O    I    .         .         .         . S       .         .         .
10430  91. . . . . . . . . . . . . . . . . . . . O .I. . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . .
10433  92.         .         .         .         O I       .         .         .         . S       .         .         .
10436  93.         .         .         .        IO         .         .         .         . S       .         .         .
10439  94.         .         .         .   I     O         .         .         .         . S       .         .         .
10442  95.         .         .        I.        O.         .         .         .         .S        .         .         .
10445  96.         .         .    I    .        O.         .         .         .         S         .         .         .
10448  97.         .         .I        .       O .         .         .         .        S.         .         .         .
10451  98.         .       I .         .     O   .         .         .         .       S .         .         .         .
10454  99.         .   I     .         .    O    .         .         .         .     S   .         .         .         .
10457 100.         .I        .         . O       .         .         .         .   S     .         .         .         .
10500 101. . . . I . . . . . . . . . . O . . . . . . . . . . . . . . . . . . . . . .S. . . . . . . . . . . . . . . . . . . . .
10503 102.     I   .         O         .         .         .         .         .S        .         .         .         .
10506 103.   I     . O       .         .         .         .         .         S         .         .         .         .
10509 104. I     O .         .         .         .         .         .         S         .         .         .         .         .
10512 105. I   O   .         .         .         .         .         .        S.         .         .         .         .         .
10515 106. I  O    .         .         .         .         .         .        S.         .         .         .         .         .
10518 107.I  O     .         .         .         .         .         .        S.         .         .         .         .         .
10521 108.I  O     .         .         .         .         .         .        S.         .         .         .         .         .
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10524 109.I  O                                                  S
10527 110.I O                                                   S
10530 111.I.O                                                   S
10533 112.I O                                                   S
10536 113.I O                                                   S
10539 114.I O                                                 S
10542 115.I O                                                 S
10545 116.I O                                                 S
10548 117.I O                                                 S
10551 118.I O                                                 S
10554 119.I O                                                 S
10557 120.I O                                               S
10600 121.I.O                                               S
10603 122.I O                                               S
10606 123.I O                                               S
10609 124.I O                                               S
10612 125.I O                                               S
10615 126.I O                                             S
10618 127.I O                                             S
10621 128.I O                                             S
10624 129I  O                                             S
10627 130I  O                                             S
10630 131I .O                                           S
10633 132I  O                                           S
10636 133I  O                                           S
10639 134I O                                            S
10642 135I O                                            S
10645 136I O                                          S
10648 137I O                                          S
10651 138I O                                          S
10654 139I O                                          S
10657 140I O                                          S
10700 141I O                                         .S
10703 142I O                                        S
10706 143I O                                        S
10709 144I O                                        S
10712 145I O                                        S
10715 146I O                                        S
10718 147I O                                        S
10721 148IO                                         S
10724 149IO                                        .S
10727 150IO                                        .S
10730 151IO                                        .S
10733 152IO                                        .S
10736 153IO                                        .S
10739 154IO                                        .S
10742 155IO                                        .S
10745 156IO                                        .S
10748 157IO                                        .S
10751 158IO                                        .S
10754 159IO                                        .S
10757 160IO                                        .S
10800 161I                                         .S
10803 162I                                         .S
10806 163I                                         .S
10809 164I                                         .S
10812 165I                                        S
10815 166I                                        S
10818 167I                                        S
10821 168I                                        S
10824 169I                                        S
10827 170I                                        S
10830 171I                                        S
10833 172I                                        S
10836 173I                                        S
10839 174I                                        S
10842 175I                                        S
10845 176I                                        S
10848 177I                                        S
10851 178I                                        S
10854 179I                                        S
10857 180I                                        S
10900 181I                                        S
10903 182I                                        S
10906 183I                                        S
10909 184I                                        S
10912 185I                                        S
10915 186I                                        S
10918 187I                                        S
10921 188I                                        S
10924 189I                                        S
10927 190I                                        S
10930 191I                                        S
10933 192I                                        S
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10936 193I . . . . . S . . . . . .
10939 194I . . . . . S . . . . . .
10942 195I . . . . . S . . . . . .
10945 196I . . . . . S . . . . . .
10948 197I . . . . . S . . . . . .
10951 198I . . . . . S . . . . . .
10954 199I . . . . . S . . . . . .
10957 200I . . . . . S . . . . . .
11000 201I . . . . . S . . . . . .
11003 202I . . . . . S . . . . . .
11006 203I . . . . . S . . . . . .
11009 204I . . . . . S . . . . . .
11012 205I . . . . . S . . . . . .
11015 206I . . . . . S . . . . . .
11018 207I . . . . . S . . . . . .
11021 208I . . . . . S . . . . . .
11024 209I . . . . . S . . . . . .
11027 210I . . . . . S . . . . . .
11030 211I . . . . . S . . . . . .
11033 212I . . . . . S . . . . . .
11036 213I . . . . . S . . . . . .
11039 214I . . . . . S . . . . . .
11042 215I . . . . . S . . . . . .
11045 216I . . . . . S . . . . . .
11048 217I . . . . . S . . . . . .
11051 218I . . . . . S . . . . . .
11054 219I . . . . . S . . . . . .
11057 220I . . . . . S . . . . . .
11100 221I . . . . . S . . . . . .
11103 222I . . . . . S . . . . . .
11106 223I . . . . . S . . . . . .
11109 224I . . . . . S . . . . . .
11112 225I . . . . . S . . . . . .
11115 226I . . . . . S . . . . . .
11118 227I . . . . . S . . . . . .
11121 228I . . . . . S . . . . . .
11124 229I . . . . . S . . . . . .
11127 230I . . . . . S . . . . . .
11130 231I . . . . . S . . . . . .
11133 232I . . . . . S . . . . . .
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11148 237I . . . . . S . . . . . .
11151 238I . . . . . S . . . . . .
11154 239I . . . . . S . . . . . .
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11203 242I . . . . . S . . . . . .
11206 243I . . . . . S . . . . . .
11209 244I . . . . . S . . . . . .
11212 245I . . . . . S . . . . . .
11215 246I . . . . . S . . . . . .
11218 247I . . . . . S . . . . . .
11221 248I . . . . . S . . . . . .
11224 249I . . . . . S . . . . . .
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11230 251I . . . . . S . . . . . .
11233 252I . . . . . S . . . . . .
11236 253I . . . . . S . . . . . .
11239 254I . . . . . S . . . . . .
11242 255I . . . . . S . . . . . .
11245 256I . . . . . S . . . . . .
11248 257I . . . . . S . . . . . .
11251 258I . . . . . S . . . . . .
11254 259I . . . . . S . . . . . .
11257 260I . . . . . S . . . . . .
11300 261I . . . . . S . . . . . .
11303 262I . . . . . S . . . . . .
11306 263I . . . . . S . . . . . .
11309 264I . . . . . S . . . . . .
11312 265I . . . . . S . . . . . .
11315 266I . . . . . S . . . . . .
11318 267I . . . . . S . . . . . .
11321 268I . . . . . S . . . . . .
11324 269I . . . . . S . . . . . .
11327 270I . . . . . S . . . . . .
11330 271I . . . . . S . . . . . .
11333 272I . . . . . S . . . . . .
11336 273I . . . . . S . . . . . .
11339 274I . . . . . S . . . . . .
11342 275I . . . . . S . . . . . .
11345 276I . . . . . S . . . . . .

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11348 277I        .         .         .         .         .         S         .         .         .         .         .         .
11351 278I        .         .         .         .         .         S         .         .         .         .         .         .
11354 279I        .         .         .         .         .         S         .         .         .         .         .         .
11357 280I        .         .         .         .         .         S         .         .         .         .         .         .
11400 281I . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
11403 282I        .         .         .         .         .         S         .         .         .         .         .         .
11406 283I        .         .         .         .         .         S         .         .         .         .         .         .
11409 284I        .         .         .         .         .         S         .         .         .         .         .         .
11412 285I        .         .         .         .         .         S         .         .         .         .         .         .
11415 286I        .         .         .         .         .         S         .         .         .         .         .         .
11418 287I        .         .         .         .         .         S         .         .         .         .         .         .
11421 288I        .         .         .         .         .         S         .         .         .         .         .         .
11424 289I        .         .         .         .         .         S         .         .         .         .         .         .
11427 290I        .         .         .         .         .         S         .         .         .         .         .         .
11430 291I . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
11433 292I        .         .         .         .         .         S         .         .         .         .         .         .
11436 293I        .         .         .         .         .         S         .         .         .         .         .         .
11439 294I        .         .         .         .         .         S         .         .         .         .         .         .
11442 295I        .         .         .         .         .         S         .         .         .         .         .         .
11445 296I        .         .         .         .         .         S         .         .         .         .         .         .
11448 297I        .         .         .         .         .         S         .         .         .         .         .         .
11451 298I        .         .         .         .         .         S         .         .         .         .         .         .
11454 299I        .         .         .         .         .         S         .         .         .         .         .         .
11457 300I---------.---------.---------.---------.---------.---------S---------.---------.---------.---------.---------.---------.
1


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            **************
            *            *
289 KK      *   SITE2B   *        DETENTION BASIN AT SITE 2B **************************
            *            *
            **************

294 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          1  PRINT CONTROL
                     IPLOT          2  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

              HYDROGRAPH ROUTING DATA

295 RS          STORAGE ROUTING
                     NSTPS          1  NUMBER OF SUBREACHES
                      ITYP       ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC    1248.00  INITIAL CONDITION
                         X        .00 WORKING R AND D COEFFICIENT

296 SV            STORAGE         .0       6.9      15.3      24.7      35.0      46.3      52.4      58.7

297 SE          ELEVATION    1248.00   1250.00   1252.00   1254.00   1256.00   1258.00   1259.00   1260.00

298 SQ          DISCHARGE         0.       18.       66.       84.      150.      240.

299 SE          ELEVATION    1248.00   1252.00   1256.22   1258.11   1258.70   1259.50

                                                    ***

                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

            STORAGE        .00      6.90     15.30     24.70     35.00     36.24     46.30     46.97     50.57     52.40
            OUTFLOW        .00      8.85     17.70     40.59     63.48     66.00     82.95     84.00    150.00    183.75
          ELEVATION    1248.00   1250.00   1252.00   1254.00   1256.00   1256.22   1258.00   1258.11   1258.70   1259.00

            STORAGE      55.55     58.70
            OUTFLOW     240.00    296.25
          ELEVATION    1259.50   1260.00
*****************************************************************************************************************************

                                        HYDROGRAPH AT STATION   SITE2B

*****************************************************************************************************************************
                                                 *                                                 *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                                 *                                                 *
  1     0000   1      0.       .0  1248.0 *  1     0500 101     170.     51.7  1258.9 *  1     1000 201      42.     25.1  1254.1
  1     0003   2      0.       .0  1248.0 *  1     0503 102     188.     52.6  1259.0 *  1     1003 202      41.     25.0  1254.0
  1     0006   3      0.       .0  1248.0 *  1     0506 103     192.     52.8  1259.1 *  1     1006 203      41.     24.8  1254.0
  1     0009   4      0.       .0  1248.0 *  1     0509 104     187.     52.6  1259.0 *  1     1009 204      40.     24.6  1254.0
  1     0012   5      0.       .0  1248.0 *  1     0512 105     178.     52.1  1258.9 *  1     1012 205      40.     24.5  1253.9
  1     0015   6      0.       .0  1248.0 *  1     0515 106     168.     51.5  1258.9 *  1     1015 206      40.     24.3  1253.9
```

1	0018	7	0.	.0	1248.0	*	1	0518	107	157.	50.9	1258.8	*	1	1018	207	39.	24.1	1253.9
1	0021	8	0.	.0	1248.0	*	1	0521	108	146.	50.4	1258.7	*	1	1021	208	39.	24.0	1253.8
1	0024	9	0.	.0	1248.0	*	1	0524	109	136.	49.8	1258.6	*	1	1024	209	38.	23.8	1253.8
1	0027	10	0.	.0	1248.0	*	1	0527	110	127.	49.3	1258.5	*	1	1027	210	38.	23.6	1253.8
1	0030	11	0.	.0	1248.0	*	1	0530	111	117.	48.8	1258.4	*	1	1030	211	38.	23.5	1253.7
1	0033	12	0.	.0	1248.0	*	1	0533	112	109.	48.3	1258.3	*	1	1033	212	37.	23.3	1253.7
1	0036	13	0.	.0	1248.0	*	1	0536	113	101.	47.9	1258.3	*	1	1036	213	37.	23.2	1253.7
1	0039	14	0.	.0	1248.0	*	1	0539	114	94.	47.5	1258.2	*	1	1039	214	37.	23.0	1253.6
1	0042	15	0.	.0	1248.0	*	1	0542	115	87.	47.1	1258.1	*	1	1042	215	36.	22.9	1253.6
1	0045	16	0.	.0	1248.0	*	1	0545	116	84.	46.8	1258.1	*	1	1045	216	36.	22.7	1253.6
1	0048	17	0.	.0	1248.0	*	1	0548	117	83.	46.4	1258.0	*	1	1048	217	35.	22.6	1253.6
1	0051	18	0.	.0	1248.0	*	1	0551	118	83.	46.1	1258.0	*	1	1051	218	35.	22.4	1253.5
1	0054	19	0.	.0	1248.0	*	1	0554	119	82.	45.7	1257.9	*	1	1054	219	35.	22.3	1253.5
1	0057	20	0.	.0	1248.0	*	1	0557	120	81.	45.4	1257.8	*	1	1057	220	34.	22.2	1253.5
1	0100	21	0.	.0	1248.0	*	1	0600	121	81.	45.1	1257.8	*	1	1100	221	34.	22.0	1253.4
1	0103	22	0.	.0	1248.0	*	1	0603	122	80.	44.7	1257.7	*	1	1103	222	34.	21.9	1253.4
1	0106	23	0.	.0	1248.0	*	1	0606	123	80.	44.4	1257.7	*	1	1106	223	33.	21.7	1253.4
1	0109	24	0.	.0	1248.0	*	1	0609	124	79.	44.1	1257.6	*	1	1109	224	33.	21.6	1253.3
1	0112	25	0.	.0	1248.0	*	1	0612	125	79.	43.7	1257.5	*	1	1112	225	33.	21.5	1253.3
1	0115	26	0.	.0	1248.0	*	1	0615	126	78.	43.4	1257.5	*	1	1115	226	32.	21.3	1253.3
1	0118	27	0.	.0	1248.0	*	1	0618	127	78.	43.1	1257.4	*	1	1118	227	32.	21.2	1253.3
1	0121	28	0.	.0	1248.0	*	1	0621	128	77.	42.8	1257.4	*	1	1121	228	32.	21.1	1253.2
1	0124	29	0.	.0	1248.0	*	1	0624	129	76.	42.5	1257.3	*	1	1124	229	31.	20.9	1253.2
1	0127	30	0.	.0	1248.0	*	1	0627	130	76.	42.2	1257.3	*	1	1127	230	31.	20.8	1253.2
1	0130	31	0.	.0	1248.0	*	1	0630	131	75.	41.8	1257.2	*	1	1130	231	31.	20.7	1253.1
1	0133	32	0.	.0	1248.0	*	1	0633	132	75.	41.5	1257.2	*	1	1133	232	30.	20.5	1253.1
1	0136	33	0.	.0	1248.0	*	1	0636	133	74.	41.2	1257.1	*	1	1136	233	30.	20.4	1253.1
1	0139	34	0.	.0	1248.0	*	1	0639	134	74.	40.9	1257.0	*	1	1139	234	30.	20.3	1253.1
1	0142	35	0.	.0	1248.0	*	1	0642	135	73.	40.6	1257.0	*	1	1142	235	30.	20.2	1253.0
1	0145	36	0.	.0	1248.0	*	1	0645	136	73.	40.3	1256.9	*	1	1145	236	29.	20.1	1253.0
1	0148	37	0.	.0	1248.0	*	1	0648	137	72.	40.0	1256.9	*	1	1148	237	29.	19.9	1253.0
1	0151	38	0.	.0	1248.0	*	1	0651	138	72.	39.7	1256.8	*	1	1151	238	29.	19.8	1253.0
1	0154	39	0.	.0	1248.0	*	1	0654	139	71.	39.4	1256.8	*	1	1154	239	28.	19.7	1252.9
1	0157	40	0.	.0	1248.0	*	1	0657	140	71.	39.1	1256.7	*	1	1157	240	28.	19.6	1252.9
1	0200	41	0.	.0	1248.0	*	1	0700	141	70.	38.8	1256.7	*	1	1200	241	28.	19.5	1252.9
1	0203	42	0.	.0	1248.0	*	1	0703	142	70.	38.5	1256.6	*	1	1203	242	28.	19.3	1252.9
1	0206	43	0.	.0	1248.0	*	1	0706	143	69.	38.2	1256.6	*	1	1206	243	27.	19.2	1252.8
1	0209	44	0.	.0	1248.0	*	1	0709	144	69.	38.0	1256.5	*	1	1209	244	27.	19.1	1252.8
1	0212	45	0.	.0	1248.0	*	1	0712	145	68.	37.7	1256.5	*	1	1212	245	27.	19.0	1252.8
1	0215	46	0.	.0	1248.0	*	1	0715	146	68.	37.4	1256.4	*	1	1215	246	26.	18.9	1252.8
1	0218	47	0.	.0	1248.0	*	1	0718	147	67.	37.1	1256.4	*	1	1218	247	26.	18.8	1252.7
1	0221	48	0.	.0	1248.0	*	1	0721	148	67.	36.8	1256.3	*	1	1221	248	26.	18.7	1252.7
1	0224	49	0.	.0	1248.0	*	1	0724	149	67.	36.6	1256.3	*	1	1224	249	26.	18.6	1252.7
1	0227	50	0.	.0	1248.0	*	1	0727	150	66.	36.3	1256.2	*	1	1227	250	25.	18.5	1252.7
1	0230	51	0.	.0	1248.0	*	1	0730	151	66.	36.0	1256.2	*	1	1230	251	25.	18.4	1252.7
1	0233	52	0.	.0	1248.0	*	1	0733	152	65.	35.7	1256.1	*	1	1233	252	25.	18.3	1252.6
1	0236	53	0.	.0	1248.0	*	1	0736	153	64.	35.5	1256.1	*	1	1236	253	25.	18.2	1252.6
1	0239	54	0.	.0	1248.0	*	1	0739	154	64.	35.2	1256.0	*	1	1239	254	24.	18.1	1252.6
1	0242	55	0.	.0	1248.0	*	1	0742	155	63.	35.0	1256.0	*	1	1242	255	24.	18.0	1252.6
1	0245	56	0.	.0	1248.0	*	1	0745	156	63.	34.7	1255.9	*	1	1245	256	24.	17.9	1252.5
1	0248	57	0.	.0	1248.0	*	1	0748	157	62.	34.4	1255.9	*	1	1248	257	24.	17.8	1252.5
1	0251	58	0.	.0	1248.0	*	1	0751	158	62.	34.2	1255.8	*	1	1251	258	23.	17.7	1252.5
1	0254	59	0.	.0	1248.0	*	1	0754	159	61.	33.9	1255.8	*	1	1254	259	23.	17.6	1252.5
1	0257	60	0.	.0	1248.0	*	1	0757	160	61.	33.7	1255.7	*	1	1257	260	23.	17.5	1252.5
1	0300	61	0.	.0	1248.0	*	1	0800	161	60.	33.4	1255.7	*	1	1300	261	23.	17.4	1252.4
1	0303	62	0.	.0	1248.0	*	1	0803	162	59.	33.2	1255.6	*	1	1303	262	23.	17.3	1252.4
1	0306	63	0.	.0	1248.0	*	1	0806	163	59.	32.9	1255.6	*	1	1306	263	22.	17.2	1252.4
1	0309	64	0.	.0	1248.0	*	1	0809	164	58.	32.7	1255.6	*	1	1309	264	22.	17.1	1252.4
1	0312	65	0.	.0	1248.0	*	1	0812	165	58.	32.5	1255.5	*	1	1312	265	22.	17.0	1252.4
1	0315	66	0.	.0	1248.0	*	1	0815	166	57.	32.2	1255.5	*	1	1315	266	22.	16.9	1252.3
1	0318	67	0.	.0	1248.0	*	1	0818	167	57.	32.0	1255.4	*	1	1318	267	21.	16.8	1252.3
1	0321	68	0.	.0	1248.0	*	1	0821	168	56.	31.7	1255.4	*	1	1321	268	21.	16.7	1252.3
1	0324	69	0.	.0	1248.0	*	1	0824	169	56.	31.5	1255.3	*	1	1324	269	21.	16.7	1252.3
1	0327	70	0.	.0	1248.0	*	1	0827	170	55.	31.3	1255.3	*	1	1327	270	21.	16.6	1252.3
1	0330	71	0.	.0	1248.0	*	1	0830	171	55.	31.1	1255.2	*	1	1330	271	21.	16.5	1252.3
1	0333	72	0.	.0	1248.0	*	1	0833	172	54.	30.8	1255.2	*	1	1333	272	20.	16.4	1252.2
1	0336	73	0.	.0	1248.0	*	1	0836	173	54.	30.6	1255.1	*	1	1336	273	20.	16.3	1252.2
1	0339	74	0.	.0	1248.0	*	1	0839	174	53.	30.4	1255.1	*	1	1339	274	20.	16.2	1252.2
1	0342	75	0.	.0	1248.0	*	1	0842	175	53.	30.2	1255.1	*	1	1342	275	20.	16.2	1252.2
1	0345	76	0.	.0	1248.0	*	1	0845	176	52.	30.0	1255.0	*	1	1345	276	20.	16.1	1252.2
1	0348	77	0.	.0	1248.0	*	1	0848	177	52.	29.7	1255.0	*	1	1348	277	19.	16.0	1252.1
1	0351	78	0.	.0	1248.0	*	1	0851	178	51.	29.5	1254.9	*	1	1351	278	19.	15.9	1252.1
1	0354	79	0.	.0	1248.0	*	1	0854	179	51.	29.3	1254.9	*	1	1354	279	19.	15.8	1252.1
1	0357	80	1.	.5	1248.1	*	1	0857	180	50.	29.1	1254.9	*	1	1357	280	19.	15.8	1252.1
1	0400	81	2.	1.9	1248.6	*	1	0900	181	50.	28.9	1254.8	*	1	1400	281	19.	15.7	1252.1
1	0403	82	5.	4.0	1249.2	*	1	0903	182	49.	28.7	1254.8	*	1	1403	282	18.	15.6	1252.1
1	0406	83	8.	6.3	1249.8	*	1	0906	183	49.	28.5	1254.7	*	1	1406	283	18.	15.5	1252.0
1	0409	84	11.	8.8	1250.4	*	1	0909	184	49.	28.3	1254.7	*	1	1409	284	18.	15.4	1252.0
1	0412	85	14.	11.3	1251.1	*	1	0912	185	48.	28.1	1254.7	*	1	1412	285	18.	15.4	1252.0
1	0415	86	16.	14.0	1251.7	*	1	0915	186	48.	27.9	1254.6	*	1	1415	286	18.	15.3	1252.0
1	0418	87	21.	16.7	1252.3	*	1	0918	187	47.	27.7	1254.6	*	1	1418	287	18.	15.2	1252.0
1	0421	88	28.	19.4	1252.9	*	1	0921	188	47.	27.5	1254.5	*	1	1421	288	18.	15.2	1252.0
1	0424	89	34.	22.2	1253.5	*	1	0924	189	46.	27.3	1254.5	*	1	1424	289	17.	15.1	1251.9
1	0427	90	41.	24.9	1254.0	*	1	0927	190	46.	27.1	1254.5	*	1	1427	290	17.	15.0	1251.9

1	0430	91	47.	27.7	1254.6	*	1	0930	191	46.	26.9	1254.4	*	1	1430	291	17.	14.9	1251.9
1	0433	92	53.	30.5	1255.1	*	1	0933	192	45.	26.7	1254.4	*	1	1433	292	17.	14.9	1251.9
1	0436	93	59.	33.2	1255.7	*	1	0936	193	45.	26.6	1254.4	*	1	1436	293	17.	14.8	1251.9
1	0439	94	65.	35.9	1256.2	*	1	0939	194	44.	26.4	1254.3	*	1	1439	294	17.	14.7	1251.9
1	0442	95	70.	38.6	1256.6	*	1	0942	195	44.	26.2	1254.3	*	1	1442	295	17.	14.7	1251.8
1	0445	96	74.	41.1	1257.1	*	1	0945	196	43.	26.0	1254.3	*	1	1445	296	17.	14.6	1251.8
1	0448	97	78.	43.6	1257.5	*	1	0948	197	43.	25.8	1254.2	*	1	1448	297	17.	14.5	1251.8
1	0451	98	82.	46.0	1258.0	*	1	0951	198	43.	25.6	1254.2	*	1	1451	298	17.	14.4	1251.8
1	0454	99	107.	48.2	1258.3	*	1	0954	199	42.	25.5	1254.2	*	1	1454	299	17.	14.4	1251.8
1	0457	100	142.	50.2	1258.6	*	1	0957	200	42.	25.3	1254.1	*	1	1457	300	17.	14.3	1251.8
						*							*						

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	14.95-HR
+ (CFS)	(HR)					
		(CFS)				
+ 192.	5.10		72.	37.	37.	37.
		(INCHES)	1.401	1.796	1.796	1.796
		(AC-FT)	36.	46.	46.	46.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	14.95-HR
+ (AC-FT)	(HR)				
53.	5.10	36.	20.	20.	20.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	14.95-HR
+ (FEET)	(HR)				
1259.07	5.10	1256.17	1252.77	1252.77	1252.77

CUMULATIVE AREA = .47 SQ MI

1 STATION SITE2B

```
                    (I) INFLOW,   (O) OUTFLOW
        0.     100.     200.     300.     400.     500.     600.     700.     800.       0.       0.       0.       0.
                                                                                (S) STORAGE
        0.       0.       0.       0.       0.       0.       0.      20.      40.      60.       0.       0.       0.
DAHRMN PER
 10000   1I---------.---------.---------.---------.---------.---------S---------.---------.---------.---------.---------.---------.
 10003   2I         .         .         .         .         .         S         .         .         .         .         .         .
 10006   3I         .         .         .         .         .         S         .         .         .         .         .         .
 10009   4I         .         .         .         .         .         S         .         .         .         .         .         .
 10012   5I         .         .         .         .         .         S         .         .         .         .         .         .
 10015   6I         .         .         .         .         .         S         .         .         .         .         .         .
 10018   7I         .         .         .         .         .         S         .         .         .         .         .         .
 10021   8I         .         .         .         .         .         S         .         .         .         .         .         .
 10024   9I         .         .         .         .         .         S         .         .         .         .         .         .
 10027  10I         .         .         .         .         .         S         .         .         .         .         .         .
 10030  11I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
 10033  12I         .         .         .         .         .         S         .         .         .         .         .         .
 10036  13I         .         .         .         .         .         S         .         .         .         .         .         .
 10039  14I         .         .         .         .         .         S         .         .         .         .         .         .
 10042  15I         .         .         .         .         .         S         .         .         .         .         .         .
 10045  16I         .         .         .         .         .         S         .         .         .         .         .         .
 10048  17I         .         .         .         .         .         S         .         .         .         .         .         .
 10051  18I         .         .         .         .         .         S         .         .         .         .         .         .
 10054  19I         .         .         .         .         .         S         .         .         .         .         .         .
 10057  20I         .         .         .         .         .         S         .         .         .         .         .         .
 10100  21I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
 10103  22I         .         .         .         .         .         S         .         .         .         .         .         .
 10106  23I         .         .         .         .         .         S         .         .         .         .         .         .
 10109  24I         .         .         .         .         .         S         .         .         .         .         .         .
 10112  25I         .         .         .         .         .         S         .         .         .         .         .         .
 10115  26I         .         .         .         .         .         S         .         .         .         .         .         .
 10118  27I         .         .         .         .         .         S         .         .         .         .         .         .
 10121  28I         .         .         .         .         .         S         .         .         .         .         .         .
 10124  29I         .         .         .         .         .         S         .         .         .         .         .         .
 10127  30I         .         .         .         .         .         S         .         .         .         .         .         .
 10130  31I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
 10133  32I         .         .         .         .         .         S         .         .         .         .         .         .
 10136  33I         .         .         .         .         .         S         .         .         .         .         .         .
 10139  34I         .         .         .         .         .         S         .         .         .         .         .         .
 10142  35I         .         .         .         .         .         S         .         .         .         .         .         .
 10145  36I         .         .         .         .         .         S         .         .         .         .         .         .
 10148  37I         .         .         .         .         .         S         .         .         .         .         .         .
 10151  38I         .         .         .         .         .         S         .         .         .         .         .         .
 10154  39I         .         .         .         .         .         S         .         .         .         .         .         .
 10157  40I         .         .         .         .         .         S         .         .         .         .         .         .
 10200  41I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
 10203  42I         .         .         .         .         .         S         .         .         .         .         .         .
 10206  43I         .         .         .         .         .         S         .         .         .         .         .         .
 10209  44I         .         .         .         .         .         S         .         .         .         .         .         .
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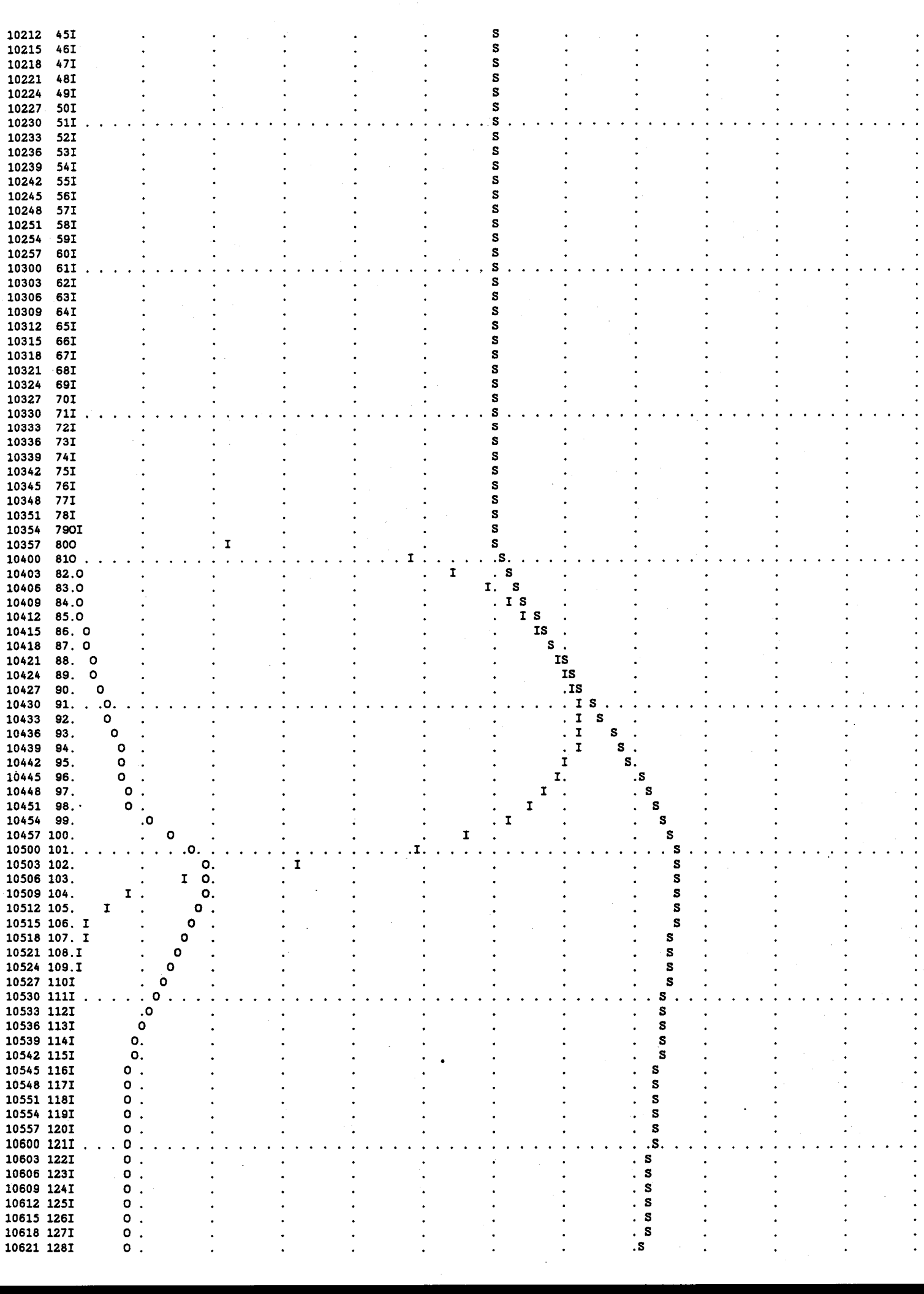

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10624 129I       O .         .         .         .         .         .         .         .S        .         .         .         .
10627 130I       O .         .         .         .         .         .         .         .S        .         .         .         .
10630 131I . . . O . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .S. . . . . . . . . . . . . . . . . . . .
10633 132I      O  .         .         .         .         .         .         .         .S        .         .         .         .
10636 133I      O  .         .         .         .         .         .         .         .S        .         .         .         .
10639 134I      O  .         .         .         .         .         .         .         S         .         .         .         .
10642 135I      O  .         .         .         .         .         .         .         S         .         .         .         .
10645 136I      O  .         .         .         .         .         .         .         S         .         .         .         .
10648 137I      O  .         .         .         .         .         .         .         S         .         .         .         .
10651 138I      O  .         .         .         .         .         .         .         S         .         .         .         .
10654 139I      O  .         .         .         .         .         .         .         S         .         .         .         .
10657 140I      O  .         .         .         .         .         .         .         S         .         .         .         .
10700 141I . . .O. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .S. . . . . . . . . . . . . . . . . . . . .
10703 142I      O  .         .         .         .         .         .         .        S.         .         .         .         .
10706 143I      O  .         .         .         .         .         .         .        S.         .         .         .         .
10709 144I      O  .         .         .         .         .         .         .        S.         .         .         .         .
10712 145I      O  .         .         .         .         .         .         .        S.         .         .         .         .
10715 146I      O  .         .         .         .         .         .         .        S.         .         .         .         .
10718 147I      O  .         .         .         .         .         .         .        S.         .         .         .         .
10721 148I      O  .         .         .         .         .         .         .       S .         .         .         .         .
10724 149I      O  .         .         .         .         .         .         .       S .         .         .         .         .
10727 150I      O  .         .         .         .         .         .         .       S .         .         .         .         .
10730 151I . . .O. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . .
10733 152I     O   .         .         .         .         .         .         .       S .         .         .         .         .
10736 153I     O   .         .         .         .         .         .         .       S .         .         .         .         .
10739 154I     O   .         .         .         .         .         .         .       S .         .         .         .         .
10742 155I     O   .         .         .         .         .         .         .      S  .         .         .         .         .
10745 156I     O   .         .         .         .         .         .         .      S  .         .         .         .         .
10748 157I     O   .         .         .         .         .         .         .      S  .         .         .         .         .
10751 158I     O   .         .         .         .         .         .         .      S  .         .         .         .         .
10754 159I     O   .         .         .         .         .         .         .      S  .         .         .         .         .
10757 160I     O   .         .         .         .         .         .         .      S  .         .         .         .         .
10800 161I . . O . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .S. . . . . . . . . . . . . . . . . . . . . .
10803 162I     O   .         .         .         .         .         .         .      S  .         .         .         .         .
10806 163I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10809 164I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10812 165I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10815 166I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10818 167I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10821 168I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10824 169I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10827 170I     O   .         .         .         .         .         .         .     S   .         .         .         .         .
10830 171I . .O. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . .
10833 172I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10836 173I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10839 174I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10842 175I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10845 176I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10848 177I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10851 178I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10854 179I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10857 180I    O    .         .         .         .         .         .         .    S    .         .         .         .         .
10900 181I . .O. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . .
10903 182I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10906 183I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10909 184I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10912 185I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10915 186I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10918 187I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10921 188I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10924 189I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10927 190I    O    .         .         .         .         .         .         .   S     .         .         .         .         .
10930 191I . .O. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .S. . . . . . . . . . . . . . . . . . . . . . .
10933 192I    O    .         .         .         .         .         .         .  S      .         .         .         .         .
10936 193I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
10939 194I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
10942 195I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
10945 196I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
10948 197I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
10951 198I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
10954 199I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
10957 200I   O     .         .         .         .         .         .         .  S      .         .         .         .         .
11000 201I . O . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .S. . . . . . . . . . . . . . . . . . . . . . .
11003 202I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11006 203I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11009 204I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11012 205I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11015 206I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11018 207I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11021 208I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11024 209I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11027 210I   O     .         .         .         .         .         .         . S       .         .         .         .         .
11030 211I . O . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S . . . . . . . . . . . . . . . . . . . . . . . .
11033 212I   O     .         .         .         .         .         .         . S       .         .         .         .         .
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11036 213I   O     .         .         .         .         .         .         . S       .         .         .         .
11039 214I   O     .         .         .         .         .         .         . S       .         .         .         .
11042 215I   O     .         .         .         .         .         .         .S        .         .         .         .
11045 216I   O     .         .         .         .         .         .         .S        .         .         .         .
11048 217I   O     .         .         .         .         .         .         .S        .         .         .         .
11051 218I   O     .         .         .         .         .         .         .S        .         .         .         .
11054 219I  O      .         .         .         .         .         .         .S        .         .         .         .
11057 220I  O      .         .         .         .         .         .         .S        .         .         .         .
11100 221I .O...................................................................S.................................................
11103 222I  O      .         .         .         .         .         .         .S        .         .         .         .
11106 223I  O      .         .         .         .         .         .         .S        .         .         .         .
11109 224I  O      .         .         .         .         .         .         .S        .         .         .         .
11112 225I  O      .         .         .         .         .         .         .S        .         .         .         .
11115 226I  O      .         .         .         .         .         .         .S        .         .         .         .
11118 227I  O      .         .         .         .         .         .         .S        .         .         .         .
11121 228I  O      .         .         .         .         .         .         .S        .         .         .         .
11124 229I  O      .         .         .         .         .         .         S         .         .         .         .         .
11127 230I  O      .         .         .         .         .         .         S         .         .         .         .         .
11130 231I .O..................................................................S..................................................
11133 232I  O      .         .         .         .         .         .         S         .         .         .         .         .
11136 233I  O      .         .         .         .         .         .         S         .         .         .         .         .
11139 234I  O      .         .         .         .         .         .         S         .         .         .         .         .
11142 235I  O      .         .         .         .         .         .         S         .         .         .         .         .
11145 236I  O      .         .         .         .         .         .         S         .         .         .         .         .
11148 237I  O      .         .         .         .         .         .         S         .         .         .         .         .
11151 238I  O      .         .         .         .         .         .         S         .         .         .         .         .
11154 239I  O      .         .         .         .         .         .         S         .         .         .         .         .
11157 240I  O      .         .         .         .         .         .         S         .         .         .         .         .
11200 241I .O..................................................................S..................................................
11203 242I  O      .         .         .         .         .         .         S         .         .         .         .         .
11206 243I  O      .         .         .         .         .         .         S         .         .         .         .         .
11209 244I  O      .         .         .         .         .         .         S         .         .         .         .         .
11212 245I  O      .         .         .         .         .         .         S         .         .         .         .         .
11215 246I  O      .         .         .         .         .         .        S.         .         .         .         .         .
11218 247I  O      .         .         .         .         .         .        S.         .         .         .         .         .
11221 248I  O      .         .         .         .         .         .        S.         .         .         .         .         .
11224 249I  O      .         .         .         .         .         .        S.         .         .         .         .         .
11227 250I  O      .         .         .         .         .         .        S.         .         .         .         .         .
11230 251I .O.................................................................S...................................................
11233 252I O       .         .         .         .         .         .        S.         .         .         .         .         .
11236 253I O       .         .         .         .         .         .        S.         .         .         .         .         .
11239 254I O       .         .         .         .         .         .        S.         .         .         .         .         .
11242 255I O       .         .         .         .         .         .        S.         .         .         .         .         .
11245 256I O       .         .         .         .         .         .        S.         .         .         .         .         .
11248 257I O       .         .         .         .         .         .        S.         .         .         .         .         .
11251 258I O       .         .         .         .         .         .        S.         .         .         .         .         .
11254 259I O       .         .         .         .         .         .        S.         .         .         .         .         .
11257 260I O       .         .         .         .         .         .        S.         .         .         .         .         .
11300 261I O .................................................................S...................................................
11303 262I O       .         .         .         .         .         .        S.         .         .         .         .         .
11306 263I O       .         .         .         .         .         .        S.         .         .         .         .         .
11309 264I O       .         .         .         .         .         .        S.         .         .         .         .         .
11312 265I O       .         .         .         .         .         .        S.         .         .         .         .         .
11315 266I O       .         .         .         .         .         .       S .         .         .         .         .         .
11318 267I O       .         .         .         .         .         .       S .         .         .         .         .         .
11321 268I O       .         .         .         .         .         .       S .         .         .         .         .         .
11324 269I O       .         .         .         .         .         .       S .         .         .         .         .         .
11327 270I O       .         .         .         .         .         .       S .         .         .         .         .         .
11330 271I O ................................................................S....................................................
11333 272I O       .         .         .         .         .         .       S .         .         .         .         .         .
11336 273I O       .         .         .         .         .         .       S .         .         .         .         .         .
11339 274I O       .         .         .         .         .         .       S .         .         .         .         .         .
11342 275I O       .         .         .         .         .         .       S .         .         .         .         .         .
11345 276I O       .         .         .         .         .         .       S .         .         .         .         .         .
11348 277I O       .         .         .         .         .         .       S .         .         .         .         .         .
11351 278I O       .         .         .         .         .         .       S .         .         .         .         .         .
11354 279I O       .         .         .         .         .         .       S .         .         .         .         .         .
11357 280I O       .         .         .         .         .         .       S .         .         .         .         .         .
11400 281I O ................................................................S....................................................
11403 282I O       .         .         .         .         .         .       S .         .         .         .         .         .
11406 283I O       .         .         .         .         .         .       S .         .         .         .         .         .
11409 284I O       .         .         .         .         .         .       S .         .         .         .         .         .
11412 285I O       .         .         .         .         .         .       S .         .         .         .         .         .
11415 286I O       .         .         .         .         .         .       S .         .         .         .         .         .
11418 287I O       .         .         .         .         .         .       S .         .         .         .         .         .
11421 288I O       .         .         .         .         .         .       S .         .         .         .         .         .
11424 289I O       .         .         .         .         .         .       S .         .         .         .         .         .
11427 290I O       .         .         .         .         .         .       S .         .         .         .         .         .
11430 291I O ...............................................................S.....................................................
11433 292I O       .         .         .         .         .         .      S  .         .         .         .         .         .
11436 293I O       .         .         .         .         .         .      S  .         .         .         .         .         .
11439 294I O       .         .         .         .         .         .      S  .         .         .         .         .         .
11442 295I O       .         .         .         .         .         .      S  .         .         .         .         .         .
11445 296I O       .         .         .         .         .         .      S  .         .         .         .         .         .
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11448 297I O      .         .         .         .         .         .         S         .         .         .         .         .         .
11451 298I O      .         .         .         .         .         .         S         .         .         .         .         .         .
11454 299I O      .         .         .         .         .         .         S         .         .         .         .         .         .
11457 300I-O-------.---------.---------.---------.---------.---------.------S--.---------.---------.---------.---------.---------.
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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	140S	496.	4.25	69.	28.	28.	.52		
+	DIVERSION TO	OR140	20.	4.25	4.	2.	2.	.52		
+	HYDROGRAPH AT	DT140	496.	4.25	65.	26.	26.	.52		
+	ROUTED TO	140RR	26.	5.10	25.	18.	18.	.52		
+									72.36	5.15
+	ROUTED TO	RM140	26.	5.45	25.	18.	18.	.52		
+	HYDROGRAPH AT	141S	263.	4.10	38.	15.	15.	.19		
+	DIVERSION TO	OR141	57.	4.10	5.	2.	2.	.19		
+	HYDROGRAPH AT	DT141	263.	4.10	33.	13.	13.	.19		
+	2 COMBINED AT	HC141	275.	4.10	56.	31.	31.	.70		
+	DIVERSION TO	DVT141	22.	4.10	14.	10.	10.	.70		
+	HYDROGRAPH AT	DVT141	253.	4.10	41.	20.	20.	.70		
+	HYDROGRAPH AT	142S	671.	4.15	100.	40.	40.	.51		
+	DIVERSION TO	OR142	45.	4.15	7.	3.	3.	.51		
+	HYDROGRAPH AT	DT142	671.	4.15	93.	37.	37.	.51		
+	DIVERSION TO	DVT142	319.	4.15	65.	26.	26.	.51		
+	HYDROGRAPH AT	DVT142	364.	4.15	28.	11.	11.	.51		
+	2 COMBINED AT	ADD142	614.	4.15	70.	32.	32.	1.21		
+	ROUTED TO	DET142	80.	4.60	62.	32.	32.	1.21		
+									1318.97	4.60
+	HYDROGRAPH AT	DVT141	22.	4.10	14.	10.	10.	.00		
+	HYDROGRAPH AT	DVT142	319.	4.45	65.	26.	26.	.00		
+	3 COMBINED AT	HC142	417.	4.45	138.	68.	68.	1.21		
+	ROUTED TO	RM142	416.	4.60	138.	67.	67.	1.21		
+	HYDROGRAPH AT	143S	841.	4.15	136.	55.	55.	.60		

	DIVERSION TO								
+		OR143	58.	4.15	11.	5.	5.	.60	
	HYDROGRAPH AT								
+		DT143	841.	4.15	125.	50.	50.	.60	
	2 COMBINED AT								
+		HC143	1221.	4.15	258.	117.	117.	1.82	
	ROUTED TO								
+		RM143	1220.	4.20	258.	117.	117.	1.82	
	DIVERSION TO								
+		DIV2A	660.	4.20	89.	36.	36.	1.82	
	HYDROGRAPH AT								
+		BYPASS	560.	4.20	169.	81.	81.	1.82	
	HYDROGRAPH AT								
+		DIV 2A	660.	4.20	89.	36.	36.	.00	
	HYDROGRAPH AT								
+		144S	615.	4.20	100.	40.	40.	.47	
	DIVERSION TO								
+		OR144	14.	4.20	4.	2.	2.	.47	
	HYDROGRAPH AT								
+		DT144	615.	4.20	96.	38.	38.	.47	
	DIVERSION TO								
+		DIV1P	265.	3.90	20.	8.	8.	.47	
	HYDROGRAPH AT								
+		DIV1P	350.	3.90	76.	31.	31.	.47	
	2 COMBINED AT								
+		SITE2A	1010.	4.20	165.	66.	66.	.47	
	ROUTED TO								
+		SITE2A	806.	4.55	165.	66.	66.	.47	
+									1263.29 4.55
	DIVERSION TO								
+		OUTL2A	86.	4.55	44.	18.	18.	.47	
	HYDROGRAPH AT								
+		60INCH	720.	4.55	121.	48.	48.	.47	
	ROUTED TO								
+		SITE2B	192.	5.10	72.	37.	37.	.47	
+									1259.07 5.10
	HYDROGRAPH AT								
+		RET1P	265.	4.20	20.	8.	8.	.00	
	HYDROGRAPH AT								
+		2A RET	86.	4.55	44.	18.	18.	.00	
	4 COMBINED AT								
+		HC144	922.	4.25	297.	144.	144.	2.29	
	ROUTED TO								
+		RM144	921.	4.30	297.	144.	144.	2.29	
	HYDROGRAPH AT								
+		145S	786.	4.10	121.	49.	49.	.55	
	2 COMBINED AT								
+		HC145	1636.	4.25	405.	192.	192.	2.84	

1

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

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	INTERPOLATED TO COMPUTATION INTERVAL DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
RM140	MANE	3.00	26.07	330.00	.79	3.00	26.07	330.00	.79

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2263E+02 EXCESS= .0000E+00 OUTFLOW= .2176E+02 BASIN STORAGE= .6323E+00 PERCENT ERROR=   1.1

            RM142  MANE        3.00    415.54    276.00      1.28      3.00    415.54    276.00        1.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8393E+02 EXCESS= .0000E+00 OUTFLOW= .8311E+02 BASIN STORAGE= .9764E+00 PERCENT ERROR=   -.2

            RM143  MANE        2.19   1220.60    252.19      1.49      3.00   1220.23    252.00        1.49

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1450E+03 EXCESS= .0000E+00 OUTFLOW= .1449E+03 BASIN STORAGE= .2244E+00 PERCENT ERROR=    .0

            RM144  MANE        3.00    920.67    258.00      1.45      3.00    920.67    258.00        1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1780E+03 EXCESS= .0000E+00 OUTFLOW= .1774E+03 BASIN STORAGE= .8560E+00 PERCENT ERROR=   -.1


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

APPENDIX D

EXISTING CONDITIONS
HEC - 1 MODEL OF 10TH STREET WASH

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*          SEPTEMBER 1990              *
*           VERSION 4.0                *
*                                      *
* RUN DATE  08/29/1995  TIME  10:16:44 *
*                                      *
****************************************
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```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
****************************************
```

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

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

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

1 HEC-1 INPUT PAGE 1

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

   1          ID       FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
   2          ID       TENTH STREET WASH DETENTION BASIN NO 2  (FCD 95-18)
   3          ID       PREPARED BY Rust Environment & Infrastructure Inc.
   4          ID       LAST REVISED: AUGUST 28, 1995
   5          ID       HEC-1 INPUT FILENAME : TSWEXST.HC1
   6          ID
   7          ID       HEC-1 MODEL REPRESENTING EXISTING WATERSHED CONDITIONS
   8          ID       WITH DETENTION BASIN 1 AS DESCRIBED BELOW
   9          ID
  10          ID      EXISTING CONDITIONS MODEL PROVIDED BY STANLEY CONSULTANTS (SCI)
  11          ID  **** THE FOLLOWING COMMENTS WERE PRESENT IN THE MODEL DELIVERED BY SCI ****
  12          ID
  13          ID       FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
  14          ID       TENTH STREET WASH DETENTION BASIN NO 1  (FCD 93-31)
  15          ID       STANLEY CONSULTANTS, INC.  (SCI JOB # 12183)
  16          ID
  17          ID       ************************************************************************
  18          ID       THIS MODEL REPRESENTS THE PROPOSED 10TH STREET WASH DETENTION BASIN #1.
  19          ID       THE FOLLOWING BASIN CHARACTERISTICS ARE EVALUATED:
  20          ID         1. INLET CONFIGURATION 1, INLET 1 CONSISTS OF A SIDE OVERFLOW WEIR
  21          ID            CONFIGURATION (100' WEIR 3.34' ABOVE FLOWLINE) FOR THE WEST TRIB
  22          ID            AND A WEIR INLET (30' WEIR AT CREST ELEV. 1321) FOR THE EAST TRIB.
  23          ID            INLET CONTROL CONDITIONS ASSUMED.
  24          ID         2. BASIN CONFIGURATION 1, 3:1 SIDES ON 3 SIDES AND A VERTICAL
  25          ID            RETAINING WALL ON THE WEST SIDE, A BOTTOM ELEVATION OF 1306, AND
  26          ID            25' ADDITIONAL R.O.W. ALONG THE SOUTH BASIN PARCEL BOUNDARY.
  27          ID         3. OUTLET CONFIGURATION 1, UTILIZING A 30" RCP TO CHASE GRADE AS THE
  28          ID            LOW FLOW AND PRINCIPAL OUTLET.
  29          ID       ****************************************************************************
  30          ID
  31          ID       ************************************************************************
  32          ID       THIS HEC-1 MODEL IS BASED ON THE KAMINSKI-HUBBARD ACDC ADMS AS MODIFIED
  33          ID       BY FCD TO REFLECT TWO HYPOTHETICAL DETENTION BASINS (NUMBERS 1 AND 2).
  34          ID       THE DIFFERENCES BETWEEN THIS MODEL AND THE ORIGINAL MODEL TRANSMITTED
  35          ID       BY FCD TO SCI AT THE PROJECT KICKOFF MEETING ARE AS FOLLOWS:
  36          ID         1. USE OF THE HEC-1 DATA STORAGE SYSTEM OPTION HAS BEEN DELETED;
  37          ID         2. THE TWO HYPOTHETICAL DETENTION BASINS 1 AND 2 HAVE BEEN DELETED;
  38          ID         3. THE CROSS SECTIONAL AREA OF THE PRINCIPAL SPILLWAY OUTLET PIPE OF
  39          ID            THE EXISTING CITY OF PHOENIX DET BASIN NO. 3 HAS BEEN CHANGED FROM
  40          ID            4.91 SQFT (WHICH CORRESPONDS TO AN OUTLET PIPE DIAM OF 30") TO
  41          ID            1.36 SQFT CORRESPONDING TO THE 14" X 14" STEEL ORIFICE PLATE WHICH
  42          ID            WAS ORIGINALLY DESIGNED AND INSTALLED.
  43          ID       ************************************************************************
  44          ID
  45          ID   ***** THE FOLLOWING COMMENTS WERE WRITTEN BY KAMINSKI HUBBARD ENGINEERS ****
  46          ID
```

```
 47          ID   ACDC AREA DRAINAGE MASTER STUDY
 48          ID   10TH STREET WASH WATERSHED
 49          ID   FILENAME:  TEN36.DAT     KHE JOB NO. 0146
 50          ID   100-YEAR 6-HOUR DURATION STORM
             *
             *  Based on FCDMC comments dated March 17,1992 we adjusted the Mannings "n"
             *  coefficient to reflect weighted averaging in lieu of log averaging.
             *  We also changed the S-graph from Phoenix Mountain to Phoenix Valley.
             *
             *DIAGRAM
1                                        HEC-1 INPUT                                          PAGE  2

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

 51          IT       3                      300
 52          IO       5

 53          KK    140S
 54          KM   RUNOFF GENERATED ON SUB-BASIN 140
 55          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 56          KM    L= 1.22 mi.  Lca= 0.51 mi.  S= 162 ft/mi.  Kn= .050  LAG= 22.87 min.
 57          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 58          BA    .516
 59          IN      15
 60          KM   RAINFALL DEPTH OF 3.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 61          KM   AN AREAL REDUCTION COEFFICIENT OF .975 WAS USED
 62          PB  2.9200
 63          KM   THE FOLLOWING PC RECORD USED A 6-HOUR RAINFALL WITH PATTERN NO. 2.01
 64          PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 65          PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 66          PC    .950    .963    .975    .988   1.000
 67          LG    .145    .339   4.25    .488   20.44
 68          UI     76.    119.    294.    391.    468.    577.    793.    930.    712.    588.
 69          UI    474.    381.    274.    154.    127.     90.     76.     26.     23.     23.
 70          UI     23.     23.      0.      0.      0.      0.      0.      0.      0.      0.
 71          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 72          KK   DT140
 73          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 2.0 AC-FT FROM SUB-BASIN 140
 74          KM                                              (Hydrograph identified as OR140)
 75          KM                                            2) Balance of runoff continues on.
 76          KM                                              (Hydrograph identified as DT140)
 77          DT   OR140     2.0
 78          DI       0   10000
 79          DQ       0   10000
 80          KM   ******************************************************************************
 81          KM    KK 140RR
 82          KM    KM ROUTE FLOW THROUGH NORTH MOUNTAIN DETENTION NO.3
 83          KM    RS      1    ELEV    55.9
 84          KM    SV      0     .06    1.52    6.32   17.42   35.46   60.34   95.64
 85          KM    SE  55.9      58      62      66      70      74      78      82
 86          KM    SL 57.15    4.91      .6      .5
 87          KM        ***********************************************************************
 88          KM    THE SL RECORD (LOW-LEVEL OUTLET) SECOND FIELD (ORIFICE AREA) VALUE HAS
 89          KM    BEEN CHANGED BY SCI FROM 4.91 sq.ft. TO 1.36 sq.ft. (14"x14" INLET)
 90          KM        ***********************************************************************
 91          KM    SS 79.66     100     3.0     1.5
 92          KM   ******************************************************************************

 93          KK   140RR
 94          KM   ROUTE FLOW THROUGH NORTH MOUNTAIN DETENTION NO.3
 95          RS       1    ELEV    55.9
 96          SV       0     .06    1.52    6.32   17.42   35.46   60.34   95.64
 97          SE    55.9      58      62      66      70      74      78      82
 98          SL   56.43    1.36      .6      .5
 99          SS   80.00     100     3.0     1.5
1                                        HEC-1 INPUT                                          PAGE  3

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

100          KK   RM140
101          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION BASIN THROUGH SUB-BASIN 141
102          KM            1) Reach Length = 3600 ft.
103          RD
104          RC    .045    .045    .045    3600   .0108
105          RX       0       0    46.5    76.4    79.9   110.2   160.2   160.2
106          RY      16    12.6     7.3       0       0     9.9    15.9      16

107          KK    141S
108          KM   RUNOFF GENERATED ON SUB-BASIN 141
109          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
110          KM    L= 0.83 mi.  Lca= 0.57 mi.  S= 315 ft/mi.  Kn= .042  LAG= 15.26 min.
111          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
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```
112          BA    .187
113          LG    .126    .303    3.61    .313   38.57
114          UI     41.    136.    222.    297.    467.    414.    304.    220.    131.     70.
115          UI     47.     23.     13.     13.     13.      0.      0.      0.      0.      0.
116          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

117          KK   DT141
118          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 2.4 AC-FT FROM SUB-BASIN 141
119          KM                                              (Hydrograph identified as OR141)
120          KM                                            2) Balance of runoff continues on.
121          KM                                              (Hydrograph identified as DT141)
122          DT   OR141     2.4
123          DI       0   10000
124          DQ       0   10000

125          KK   HC141
126          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 141 WITH ROUTED FLOW FROM DETENTION
127          HC       2
128          KM   ******************************************************************************

129          KK  DVT141   SPLIT HYDROGRAPH 141 TO DET142 AND HC142
130          KM           DI-DQ BASED ON HYDRAULIC RATING CURVE FOR PROPOSED INLET AND
131          KM           EXISTING 30" PIPE.  WEIR LENGTH IS 30' WEIR CREST IS ELEV 1321.
132          KM           DQ IS AMOUNT DIVERTED AROUND DETENTION BASIN DOWNSTREAM.
133          KM           DI-DQ DIFFERENCE IS ROUTED THRU THE PROPOSED DETENTION BASIN
134          DT  DVT141
135          DI       0      12      50     114     196     294
136          DQ       0      12      15      18      20      22
137          KM   ******************************************************************************

138          KK    142S
139          KM   RUNOFF GENERATED ON SUB-BASIN 142
140          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
141          KM    L= 1.16 mi.  Lca= 0.75 mi.  S= 257 ft/mi.  Kn= .042  LAG= 19.99 min.
142          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
143          BA    .512
144          LG    .127    .309    4.12    .267   34.03
145          UI     86.    178.    377.    488.    608.    839.   1049.    795.    637.    498.
146          UI    380.    210.    146.    107.     80.     26.     26.     26.     26.      0.
147          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
148          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

149          KK   DT142
150          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 3.6 AC-FT FROM SUB-BASIN 142
151          KM                                              (Hydrograph identified as OR142)
152          KM                                            2) Balance of runoff continues on.
153          KM                                              (Hydrograph identified as DT142)
154          DT   OR142     3.6
155          DI       0   10000
156          DQ       0   10000
157          KM   ******************************************************************************

158          KK  DVT142   SPLIT HYDROGRAPH DVT142 TO DET142 AND HC142
159          KM           DI-DQ BASED ON HYDRAULIC RATING CURVE FOR PROPOSED INLET AND
160          KM           IMPROVED WASH CROSS SECTION.  WEIR LENGTH IS 100' WEIR CREST ELEV IS
161          KM           3.34' ABOVE WASH FLOWLINE.
162          KM           DQ IS AMOUNT DIVERTED AROUND DETENTION BASIN DOWNSTREAM.
163          KM           DI-DQ DIFFERENCE IS ROUTED THRU THE PROPOSED DETENTION BASIN
164          DT  DVT142
165          DI       0     280     300     350     400     450     500     550     600     672
166          DQ       0     280     295     312     317     319     318     317     313     307

167          KK  ADD142
168          KM   COMBINE HYDROGRAPHS FROM (DI-DQ) FROM DVT141 WITH (DI-DQ) FROM DVT142
169          HC       2

170          KK  DET142   ROUTE HYDROGRAPH ADD142 THRU DET BASIN 142
171          KM           1-30" RCP  AS LOW FLOW AND PRINCIPAL OUTLET (INV. EL. 1306)
172          RS       1    STOR      -1
173          SV     .00   0.060   0.460   1.470   3.040   4.890   6.850   8.910   11.08   13.36
174          SV   15.74   18.23   20.83   23.53   26.33
175          SQ       0     4.5    15.9    29.0    37.0    44.0    50.0    55.0    60.0    65.0
176          SQ      70      72      78      80      84
177          SE    1306    1307    1308    1309    1310    1311    1312    1313    1314    1315
178          SE    1316    1317    1318    1319    1320

179          KK  DVT141    RETRIEVE PREVIOUSLY SPLIT HYDROGRAPH FROM SUB-BASIN 141
180          DR  DVT141

181          KK  DVT142    RETRIEVE PREVIOUSLY SPLIT HYDROGRAPH FROM SUB-BASIN 142
```

```
182        DR  DVT142

183        KK   HC142
184        KM   COMBINE HYDROGRAPHS (DQ) FROM DVT142, (DQ) FROM DVT141 AND DET142 OUTFLOW
185        HC       3
186        KM   ******************************************************************************

187        KK   RM142
188        KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASINS 141/142 THROUGH 143
189        KM            1) Reach Length = 5140 ft.
190        RD
191        RC    .050    .045    .050    5140   .0086
192        RX       0       0    43.8    61.3    67.4    78.3    89.8    89.8
193        RY    10.8     9.4     9.4       0       0     5.4     8.8    10.8
```



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

194        KK    143S
195        KM   RUNOFF GENERATED ON SUB-BASIN 143
196        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
197        KM    L= 1.64 mi.  Lca= 0.88  S= 273 ft/mi.  Kn= .035  LAG= 19.96 min.
198        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
199        BA    .604
200        LG    .115    .279    4.12    .269   49.66
201        UI    102.    212.    446.    577.    720.    994.   1238.    937.    750.    586.
202        UI    447.    244.    173.    125.     93.     31.     31.     31.     31.      0.
203        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
204        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

205        KK   DT143
206        KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 5.7 AC-FT FROM SUB-BASIN 143
207        KM                                              (Hydrograph identified as OR143)
208        KM                                            2) Balance of runoff continues on.
209        KM                                              (Hydrograph identified as DT143)
210        DT   OR143     5.7
211        DI       0   10000
212        DQ       0   10000

213        KK   HC143
214        KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 143 WITH ROUTED FLOW FROM 141/142
215        HC       2

216        KK   RM143
217        KO       1
218        KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 143 THROUGH 144
219        KM            1) Reach Length = 1400 ft.
220        RD
221        RC    .040    .035    .030    1400   .0100
222        RX       0       0    77.8    88.3    96.6   112.8   161.3   161.3
223        RY      10     6.2     6.2       0       0     6.3     6.9      10

224        KK    144S
225        KM   RUNOFF GENERATED ON SUB-BASIN 144
226        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
227        KM    L= 1.80 mi.  Lca= 1.11 mi.  S= 291 ft/mi.  Kn= .036  LAG= 22.95 min.
228        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
229        BA    .475
230        LG    .118    .280    3.61     .32   43.17
231        UI     70.    108.    269.    357.    428.    527.    721.    857.    657.    543.
232        UI    437.    353.    256.    145.    117.     85.     70.     26.     21.     21.
233        UI     21.     21.      0.      0.      0.      0.      0.      0.      0.      0.
234        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

235        KK   DT144
236        KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 2.1 AC-FT FROM SUB-BASIN 144
237        KM                                              (Hydrograph identified as OR144)
238        KM                                            2) Balance of runoff continues on.
239        KM                                              (Hydrograph identified as DT144)
240        DT   OR144     2.1
241        DI       0   10000
242        DQ       0   10000
```



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

243        KK   HC144
244        KM   COMBINE HYDROGRAPH FROM SUBBASIN 144 WITH ROUTED FLOW FROM RM143
245        HC       2

246        KK   RM144
247        KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 144 THROUGH 145
```

```
248          KM          1) Reach Length = 3000 ft.
249          RD
250          RC    .035    .035    .030    3000    .0073
251          RX       0       0    36.6      52    64.9    79.8   107.8   107.8
252          RY      11     7.7     7.4       0       0     8.3     8.5      11

253          KK    145S
254          KM   RUNOFF GENERATED ON SUB-BASIN 145
255          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
256          KM    L= 1.37 mi.  Lca= 0.86 mi.  S= 242 ft/mi.  Kn= .032  LAG= 17.28 min.
257          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
258          BA    .548
259          LG    .105    .265    5.67    .210   44.60
260          UI    107.    287.    526.    678.    922.   1303.    982.    755.    568.    378.
261          UI    186.    145.     98.     33.     33.     33.     33.      0.      0.      0.
262          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

263          KK   HC145
264          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 145 WITH ROUTED FLOW FROM 144
265          KM   ALSO DETERMINES 10TH STREET WASH DISCHARGE INTO ACDC
266          HC       2
267          ZZ
1
                SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  53        140S
                .
                .
  77            .------->   OR140
  72       DT140
                V
                V
  93       140RR
                V
                V
 100       RM140
                .
                .
 107            .        141S
                .           .
                .           .
 122            .           .------->   OR141
 117            .       DT141
                .           .
                .           .
 125       HC141............
                .
                .
 134            .------->  DVT141
 129      DVT141
                .
                .
 138            .        142S
                .           .
                .           .
 154            .           .------->   OR142
 149            .       DT142
                .           .
                .           .
 164            .           .------->  DVT142
 158            .      DVT142
                .           .
                .           .
 167      ADD142............
                V
                V
 170      DET142
                .
                .
 180            .           .<-------  DVT141
 179            .      DVT141
                .           .
                .           .
 182            .           .           .<-------  DVT142
 181            .           .      DVT142
                .           .           .
                .           .           .
 183       HC142........................
                V
                V
```

```
187       RM142
              .
              .
194           .        143S
              .           .
              .           .
210           .           .-------->   OR143
205           .       DT143
              .           .
              .           .
213       HC143............
              V
              V
216       RM143
              .
              .
224           .        144S
              .           .
              .           .
240           .           .-------->   OR144
235           .       DT144
              .           .
              .           .
243       HC144............
              V
              V
246       RM144
              .
              .
253           .        145S
              .           .
              .           .
263       HC145............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            SEPTEMBER 1990            *
*             VERSION 4.0              *
*                                      *
*  RUN DATE  08/29/1995  TIME  10:16:44 *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
TENTH STREET WASH DETENTION BASIN NO 2 (FCD 95-18)
PREPARED BY Rust Environment & Infrastructure Inc.
LAST REVISED: AUGUST 28, 1995
HEC-1 INPUT FILENAME : TSWEXST.HC1

HEC-1 MODEL REPRESENTING EXISTING WATERSHED CONDITIONS
WITH DETENTION BASIN 1 AS DESCRIBED BELOW

EXISTING CONDITIONS MODEL PROVIDED BY STANLEY CONSULTANTS (SCI)
**** THE FOLLOWING COMMENTS WERE PRESENT IN THE MODEL DELIVERED BY SCI ****

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
TENTH STREET WASH DETENTION BASIN NO 1 (FCD 93-31)
STANLEY CONSULTANTS, INC. (SCI JOB # 12183)

****
THIS MODEL REPRESENTS THE PROPOSED 10TH STREET WASH DETENTION BASIN #1.
THE FOLLOWING BASIN CHARACTERISTICS ARE EVALUATED:

1. INLET CONFIGURATION 1, INLET 1 CONSISTS OF A SIDE OVERFLOW WEIR CONFIGURATION (100' WEIR 3.34' ABOVE FLOWLINE) FOR THE WEST TRIB AND A WEIR INLET (30' WEIR AT CREST ELEV. 1321) FOR THE EAST TRIB. INLET CONTROL CONDITIONS ASSUMED.
2. BASIN CONFIGURATION 1, 3:1 SIDES ON 3 SIDES AND A VERTICAL RETAINING WALL ON THE WEST SIDE, A BOTTOM ELEVATION OF 1306, AND 25' ADDITIONAL R.O.W. ALONG THE SOUTH BASIN PARCEL BOUNDARY.
3. OUTLET CONFIGURATION 1, UTILIZING A 30" RCP TO CHASE GRADE AS THE LOW FLOW AND PRINCIPAL OUTLET.

****

****
THIS HEC-1 MODEL IS BASED ON THE KAMINSKI-HUBBARD ACDC ADMS AS MODIFIED
BY FCD TO REFLECT TWO HYPOTHETICAL DETENTION BASINS (NUMBERS 1 AND 2).
THE DIFFERENCES BETWEEN THIS MODEL AND THE ORIGINAL MODEL TRANSMITTED
BY FCD TO SCI AT THE PROJECT KICKOFF MEETING ARE AS FOLLOWS:

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                    1. USE OF THE HEC-1 DATA STORAGE SYSTEM OPTION HAS BEEN DELETED;
                    2. THE TWO HYPOTHETICAL DETENTION BASINS 1 AND 2 HAVE BEEN DELETED;
                    3. THE CROSS SECTIONAL AREA OF THE PRINCIPAL SPILLWAY OUTLET PIPE OF
                       THE EXISTING CITY OF PHOENIX DET BASIN NO. 3 HAS BEEN CHANGED FROM
                       4.91 SQFT (WHICH CORRESPONDS TO AN OUTLET PIPE DIAM OF 30") TO
                       1.36 SQFT CORRESPONDING TO THE 14" X 14" STEEL ORIFICE PLATE WHICH
                       WAS ORIGINALLY DESIGNED AND INSTALLED.
                 ***********************************************************************

            ***** THE FOLLOWING COMMENTS WERE WRITTEN BY KAMINSKI HUBBARD ENGINEERS ****

            ACDC AREA DRAINAGE MASTER STUDY
            10TH STREET WASH WATERSHED
            FILENAME:  TEN36.DAT     KHE JOB NO. 0146
            100-YEAR 6-HOUR DURATION STORM

 52 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     1    0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE     1    0  ENDING DATE
                   NDTIME       1457  ENDING TIME
                   ICENT          19  CENTURY MARK

              COMPUTATION INTERVAL     .05 HOURS
                   TOTAL TIME BASE   14.95 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


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


          **************
          *            *
 216 KK   *     RM143  *
          *            *
          **************

 217 KO        OUTPUT CONTROL VARIABLES
                   IPRNT          1  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL         0.  HYDROGRAPH PLOT SCALE
                      MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 143 THROUGH 144
                              1) Reach Length = 1400 ft.

            HYDROGRAPH ROUTING DATA

 220 RD       MUSKINGUM-CUNGE CHANNEL ROUTING

 221 RC       NORMAL DEPTH CHANNEL
                    ANL        .040  LEFT OVERBANK N-VALUE
                   ANCH        .035  MAIN CHANNEL N-VALUE
                    ANR        .030  RIGHT OVERBANK N-VALUE
                  RLNTH       1400.  REACH LENGTH
                    SEL       .0100  ENERGY SLOPE
                  ELMAX          .0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                   CROSS-SECTION DATA
                      --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
 223 RY     ELEVATION    10.00     6.20     6.20      .00      .00     6.30     6.90    10.00
 222 RX     DISTANCE       .00      .00    77.80    88.30    96.60   112.80   161.30   161.30

                                                  ***

                                   COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

        STORAGE        .00      .16      .36      .59      .87     1.18     1.53     1.91     2.34     2.80
        OUTFLOW        .00    12.58    41.94    87.02   148.56   227.67   325.56   443.47   582.63   744.26
      ELEVATION        .00      .53     1.05     1.58     2.11     2.63     3.16     3.68     4.21     4.74
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STORAGE	3.30	3.84	4.71	7.00	9.72	12.45	15.18	17.91	20.64	23.36
OUTFLOW	929.56	1139.70	1390.17	1866.93	2579.43	3481.11	4542.46	5746.71	7081.82	8538.41
ELEVATION	5.26	5.79	6.32	6.84	7.37	7.89	8.42	8.95	9.47	10.00

COMPUTED MUSKINGUM-CUNGE PARAMETERS
COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN			2.19	700.00	1220.60	252.19	1.49	10.64

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN			3.00		1220.23	252.00	1.49	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1450E+03 EXCESS= .0000E+00 OUTFLOW= .1449E+03 BASIN STORAGE= .2244E+00 PERCENT ERROR= .0

****

HYDROGRAPH AT STATION RM143

****

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1		0345	76	294.	1		0730	151	76.	1		1115	226	44.
1		0003	2	0.	1		0348	77	375.	1		0733	152	76.	1		1118	227	43.
1		0006	3	0.	1		0351	78	516.	1		0736	153	76.	1		1121	228	43.
1		0009	4	0.	1		0354	79	680.	1		0739	154	75.	1		1124	229	43.
1		0012	5	0.	1		0357	80	834.	1		0742	155	75.	1		1127	230	42.
1		0015	6	0.	1		0400	81	980.	1		0745	156	74.	1		1130	231	42.
1		0018	7	0.	1		0403	82	1094.	1		0748	157	74.	1		1133	232	41.
1		0021	8	0.	1		0406	83	1172.	1		0751	158	73.	1		1136	233	40.
1		0024	9	0.	1		0409	84	1209.	1		0754	159	73.	1		1139	234	39.
1		0027	10	0.	1		0412	85	1220.	1		0757	160	72.	1		1142	235	39.
1		0030	11	0.	1		0415	86	1215.	1		0800	161	72.	1		1145	236	38.
1		0033	12	0.	1		0418	87	1188.	1		0803	162	72.	1		1148	237	37.
1		0036	13	0.	1		0421	88	1136.	1		0806	163	71.	1		1151	238	37.
1		0039	14	0.	1		0424	89	1071.	1		0809	164	71.	1		1154	239	36.
1		0042	15	0.	1		0427	90	1011.	1		0812	165	70.	1		1157	240	35.
1		0045	16	0.	1		0430	91	952.	1		0815	166	70.	1		1200	241	35.
1		0048	17	0.	1		0433	92	891.	1		0818	167	69.	1		1203	242	34.
1		0051	18	0.	1		0436	93	826.	1		0821	168	69.	1		1206	243	34.
1		0054	19	0.	1		0439	94	762.	1		0824	169	69.	1		1209	244	33.
1		0057	20	0.	1		0442	95	705.	1		0827	170	68.	1		1212	245	33.
1		0100	21	0.	1		0445	96	650.	1		0830	171	68.	1		1215	246	32.
1		0103	22	0.	1		0448	97	593.	1		0833	172	67.	1		1218	247	32.
1		0106	23	0.	1		0451	98	530.	1		0836	173	67.	1		1221	248	31.
1		0109	24	0.	1		0454	99	467.	1		0839	174	67.	1		1224	249	31.
1		0112	25	0.	1		0457	100	410.	1		0842	175	66.	1		1227	250	31.
1		0115	26	0.	1		0500	101	360.	1		0845	176	66.	1		1230	251	30.
1		0118	27	0.	1		0503	102	319.	1		0848	177	65.	1		1233	252	30.
1		0121	28	0.	1		0506	103	283.	1		0851	178	65.	1		1236	253	30.
1		0124	29	0.	1		0509	104	252.	1		0854	179	65.	1		1239	254	29.
1		0127	30	0.	1		0512	105	226.	1		0857	180	64.	1		1242	255	29.
1		0130	31	0.	1		0515	106	205.	1		0900	181	64.	1		1245	256	28.
1		0133	32	0.	1		0518	107	188.	1		0903	182	63.	1		1248	257	28.
1		0136	33	0.	1		0521	108	176.	1		0906	183	63.	1		1251	258	28.
1		0139	34	0.	1		0524	109	166.	1		0909	184	63.	1		1254	259	27.
1		0142	35	0.	1		0527	110	157.	1		0912	185	62.	1		1257	260	27.
1		0145	36	0.	1		0530	111	151.	1		0915	186	62.	1		1300	261	26.
1		0148	37	0.	1		0533	112	146.	1		0918	187	61.	1		1303	262	26.
1		0151	38	0.	1		0536	113	142.	1		0921	188	61.	1		1306	263	26.
1		0154	39	0.	1		0539	114	140.	1		0924	189	60.	1		1309	264	25.
1		0157	40	0.	1		0542	115	138.	1		0927	190	60.	1		1312	265	25.
1		0200	41	0.	1		0545	116	136.	1		0930	191	59.	1		1315	266	25.
1		0203	42	0.	1		0548	117	135.	1		0933	192	59.	1		1318	267	25.
1		0206	43	0.	1		0551	118	134.	1		0936	193	59.	1		1321	268	25.
1		0209	44	0.	1		0554	119	134.	1		0939	194	58.	1		1324	269	24.
1		0212	45	0.	1		0557	120	133.	1		0942	195	58.	1		1327	270	24.
1		0215	46	0.	1		0600	121	132.	1		0945	196	57.	1		1330	271	24.
1		0218	47	0.	1		0603	122	132.	1		0948	197	57.	1		1333	272	24.
1		0221	48	0.	1		0606	123	131.	1		0951	198	56.	1		1336	273	24.
1		0224	49	0.	1		0609	124	129.	1		0954	199	56.	1		1339	274	24.
1		0227	50	0.	1		0612	125	127.	1		0957	200	55.	1		1342	275	24.
1		0230	51	0.	1		0615	126	125.	1		1000	201	55.	1		1345	276	24.
1		0233	52	0.	1		0618	127	122.	1		1003	202	54.	1		1348	277	23.

1	0236	53	0.	*	1	0621	128	118.	*	1	1006	203	54.	*	1	1351	278	23.
1	0239	54	0.	*	1	0624	129	114.	*	1	1009	204	54.	*	1	1354	279	23.
1	0242	55	0.	*	1	0627	130	109.	*	1	1012	205	53.	*	1	1357	280	23.
1	0245	56	0.	*	1	0630	131	105.	*	1	1015	206	53.	*	1	1400	281	23.
1	0248	57	0.	*	1	0633	132	102.	*	1	1018	207	52.	*	1	1403	282	23.
1	0251	58	0.	*	1	0636	133	98.	*	1	1021	208	52.	*	1	1406	283	23.
1	0254	59	0.	*	1	0639	134	95.	*	1	1024	209	51.	*	1	1409	284	23.
1	0257	60	0.	*	1	0642	135	92.	*	1	1027	210	51.	*	1	1412	285	23.
1	0300	61	0.	*	1	0645	136	89.	*	1	1030	211	51.	*	1	1415	286	23.
1	0303	62	0.	*	1	0648	137	87.	*	1	1033	212	50.	*	1	1418	287	23.
1	0306	63	0.	*	1	0651	138	85.	*	1	1036	213	50.	*	1	1421	288	23.
1	0309	64	0.	*	1	0654	139	84.	*	1	1039	214	49.	*	1	1424	289	23.
1	0312	65	0.	*	1	0657	140	83.	*	1	1042	215	49.	*	1	1427	290	23.
1	0315	66	0.	*	1	0700	141	82.	*	1	1045	216	48.	*	1	1430	291	23.
1	0318	67	0.	*	1	0703	142	81.	*	1	1048	217	48.	*	1	1433	292	23.
1	0321	68	2.	*	1	0706	143	80.	*	1	1051	218	47.	*	1	1436	293	23.
1	0324	69	37.	*	1	0709	144	80.	*	1	1054	219	47.	*	1	1439	294	22.
1	0327	70	85.	*	1	0712	145	79.	*	1	1057	220	46.	*	1	1442	295	22.
1	0330	71	101.	*	1	0715	146	79.	*	1	1100	221	46.	*	1	1445	296	22.
1	0333	72	119.	*	1	0718	147	78.	*	1	1103	222	46.	*	1	1448	297	22.
1	0336	73	145.	*	1	0721	148	78.	*	1	1106	223	45.	*	1	1451	298	22.
1	0339	74	184.	*	1	0724	149	77.	*	1	1109	224	45.	*	1	1454	299	22.
1	0342	75	234.	*	1	0727	150	77.	*	1	1112	225	44.	*	1	1457	300	22.
				*					*					*				

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	14.95-HR
1220.	4.20	(CFS)	258.	117.	117.	117.
		(INCHES)	1.319	1.493	1.493	1.493
		(AC-FT)	128.	145.	145.	145.

CUMULATIVE AREA = 1.82 SQ MI

1

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

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	140S	496.	4.25	69.	28.	28.	.52		
DIVERSION TO	OR140	20.	4.25	4.	2.	2.	.52		
HYDROGRAPH AT	DT140	496.	4.25	65.	26.	26.	.52		
ROUTED TO	140RR	26.	5.10	25.	18.	18.	.52	72.36	5.15
ROUTED TO	RM140	26.	5.45	25.	18.	18.	.52		
HYDROGRAPH AT	141S	263.	4.10	38.	15.	15.	.19		
DIVERSION TO	OR141	57.	4.10	5.	2.	2.	.19		
HYDROGRAPH AT	DT141	263.	4.10	33.	13.	13.	.19		
2 COMBINED AT	HC141	275.	4.10	56.	31.	31.	.70		
DIVERSION TO	DVT141	22.	4.10	14.	10.	10.	.70		
HYDROGRAPH AT	DVT141	253.	4.10	41.	20.	20.	.70		
HYDROGRAPH AT	142S	671.	4.15	100.	40.	40.	.51		
DIVERSION TO	OR142	45.	4.15	7.	3.	3.	.51		

+	HYDROGRAPH AT	DT142	671.	4.15	93.	37.	37.	.51	
+	DIVERSION TO	DVT142	319.	4.15	65.	26.	26.	.51	
+	HYDROGRAPH AT	DVT142	364.	4.15	28.	11.	11.	.51	
+	2 COMBINED AT	ADD142	614.	4.15	70.	32.	32.	1.21	
+	ROUTED TO	DET142	80.	4.60	62.	32.	32.	1.21	
+									1318.97 4.60
+	HYDROGRAPH AT	DVT141	22.	4.10	14.	10.	10.	.00	
+	HYDROGRAPH AT	DVT142	319.	4.45	65.	26.	26.	.00	
+	3 COMBINED AT	HC142	417.	4.45	138.	68.	68.	1.21	
+	ROUTED TO	RM142	416.	4.60	138.	67.	67.	1.21	
+	HYDROGRAPH AT	143S	841.	4.15	136.	55.	55.	.60	
+	DIVERSION TO	OR143	58.	4.15	11.	5.	5.	.60	
+	HYDROGRAPH AT	DT143	841.	4.15	125.	50.	50.	.60	
+	2 COMBINED AT	HC143	1221.	4.15	258.	117.	117.	1.82	
+	ROUTED TO	RM143	1220.	4.20	258.	117.	117.	1.82	
+	HYDROGRAPH AT	144S	615.	4.20	100.	40.	40.	.47	
+	DIVERSION TO	OR144	14.	4.20	4.	2.	2.	.47	
+	HYDROGRAPH AT	DT144	615.	4.20	96.	38.	38.	.47	
+	2 COMBINED AT	HC144	1835.	4.20	350.	156.	156.	2.29	
+	ROUTED TO	RM144	1831.	4.25	350.	155.	155.	2.29	
+	HYDROGRAPH AT	145S	786.	4.10	121.	49.	49.	.55	
+	2 COMBINED AT	HC145	2558.	4.20	461.	204.	204.	2.84	

1

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

ISTAQ	ELEMENT	DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	INTERPOLATED TO COMPUTATION INTERVAL DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)
RM140	MANE	3.00	26.07	330.00	.79	3.00	26.07	330.00	.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2263E+02 EXCESS= .0000E+00 OUTFLOW= .2176E+02 BASIN STORAGE= .6323E+00 PERCENT ERROR= 1.1

RM142	MANE	3.00	415.54	276.00	1.28	3.00	415.54	276.00	1.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8393E+02 EXCESS= .0000E+00 OUTFLOW= .8311E+02 BASIN STORAGE= .9764E+00 PERCENT ERROR= -.2

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          RM143  MANE        2.19   1220.60    252.19      1.49      3.00   1220.23    252.00        1.49

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1450E+03 EXCESS= .0000E+00 OUTFLOW= .1449E+03 BASIN STORAGE= .2244E+00 PERCENT ERROR=    .0

          RM144  MANE        3.00   1830.68    255.00      1.57      3.00   1830.68    255.00        1.57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1923E+03 EXCESS= .0000E+00 OUTFLOW= .1919E+03 BASIN STORAGE= .6055E+00 PERCENT ERROR=   -.1


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