Volume 4 - HEC-1 Input/Output "With CIP" Conditions

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

Flood Control District of Maricopa County

Registered Professional Engineer (Civil)
CERTIFICATE NO
35571
LINDA A.
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Date Signed 9/4/09
ARIZONA U.S.A.

Expires 12/31/09

Version 1.2 / September 2009
HDR Project No. 079902
FCD Contract No. 2007C031

Existing w/CIP Conditions HEC-1 (MB01)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   19AUG09  TIME  09:17:18  *
*                                      *
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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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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
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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


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

  1           ID        Flood Control District of Maricopa County
  2           ID        L303_EX_CIP_MB01 - Loop 303/ White Tanks ADMPU AHA
  3           ID        100 YEAR
  4           ID        24 Hour Storm
  5           ID        Unit Hydrograph: S-Graph
  6           ID        08/18/2009
  7           ID            FCDMC CONTRACT 2007C031
  8           ID            BY HDR ENGINEERING (#79902)
  9           ID            EXISTING CONDITIONS WITH CIP-AUGUST 2009
 10           ID            MAJOR BASIN 01
 11           ID            FILE NAME: ECIP-MB1.DAT
 12           IT       5       0       0    2000
 13           IN      15
 14           IO       3
              *DIAGRAM
              *
 15           JD   3.480  0.0001
 16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
 18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
 19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
 26           JD   3.393     5.0
 27           JD   3.306    10.0
 28           JD   3.219    20.0
 29           JD   3.132    30.0
 30           JD   3.028    60.0
 31           JD   2.965    90.0
 32           JD   2.927   120.0
              *

 33           KK     N07BASIN
 34           KM        BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
 35           BA   0.570
 36           LG    0.35    0.38    5.40    0.23       0
 37           UI       0      84     319     594     769     794     595     407     278     187
 38           UI     132      86      57      36      21      20      21       0       0       0
 39           UI       0       0       0       0       0       0       0       0       0       0
 40           UI       0       0       0       0       0       0       0       0       0       0
 41           UI       0       0       0       0       0       0       0       0       0       0
              *

 42           KK   DN07ADIVERT
 43           KM        Divert portion through openings in Corte Bella perimeter walls
 44           DT  DN07AS     0.0     0.0
 45           DI     0.0     9.0    64.0   243.0  1000.0     0.0     0.0     0.0     0.0     0.0
 46           DQ     0.0     0.0    26.0   116.0   116.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 47           KK   DN07BDIVERT
 48           KM        Divert portion through openings in Corte Bella perimeter walls
 49           DT  DN07BS     0.0     0.0
 50           DI     0.0    11.4    22.9   152.3   289.9  1000.0     0.0     0.0     0.0     0.0
 51           DQ     0.0     0.0     4.9    69.1   127.9   127.9     0.0     0.0     0.0     0.0
              *

 52           KK   DN07CDIVERT
 53           KM        Divert portion through openings in Corte Bella perimeter walls
 54           DT  DN07CS     0.0     0.0
 55           DI     0.0    64.4   209.0   452.0  1000.0     0.0     0.0     0.0     0.0     0.0
 56           DQ     0.0     0.0    38.0   107.0   107.0     0.0     0.0     0.0     0.0     0.0
              *

 57           KK   DN07DDIVERT
 58           KM        Divert at Corte Bella
 59           DT  DN07DS     0.0     0.0
 60           DI     0.0   138.7   164.6   352.2   558.0  1000.0     0.0     0.0     0.0     0.0
 61           DQ     0.0   138.7   159.8   299.2   450.0   450.0     0.0     0.0     0.0     0.0
              *

 62           KK  N07N06ROUTE
 63           KM        Pleasant Valley Country Club Master Drainage Plan
 64           KM        by DEI dated May 17, 2001
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 65          RS      10    FLOW
 66          RC   0.035   0.035   0.035    6607  0.0045    0.00
 67          RX  100.00  120.00  140.00  152.00  156.00  168.00  183.00  198.00
 68          RY  1042.5 1042.25 1042.00 1039.00 1039.10 1042.00 1042.10 1042.20
             *

 69          KK     N01BASIN
 70          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION BOUNDARY
 71          KM        GRAND AVE AND MCMICKEN DAM
 72          BA   0.345
 73          LG    0.33    0.33    4.60    0.34       1
 74          UI       0     145     559     766     560     302     161      85      46      20
 75          UI      20       0       0       0       0       0       0       0       0       0
 76          UI       0       0       0       0       0       0       0       0       0       0
 77          UI       0       0       0       0       0       0       0       0       0       0
 78          UI       0       0       0       0       0       0       0       0       0       0
             *

 79          KK    N02ABASIN
 80          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER
 81          KM        DRAINAGE PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT
 82          KM        AS-BUILT CONDITIONS AND MC MICKEN DAM
 83          BA   0.083
 84          LG    0.34    0.35    5.00    0.27       0
 85          UI       0      10      27      55      79      94      93      76      57      41
 86          UI      31      21      17      11       9       7       4       2       3       2
 87          UI       3       0       0       0       0       0       0       0       0       0
 88          UI       0       0       0       0       0       0       0       0       0       0
 89          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 90          KK  N2AN01ROUTE
 91          KM        Cross-section: cross-section from aerial
 92          KM        Manning's N Value: Natural desert wash with vegetation
 93          RS       5    FLOW
 94          RC   0.035   0.035   0.035    2386  0.0010    0.00
 95          RX  100.00  120.00  140.00  149.00  150.00  160.00  180.00  200.00
 96          RY  1000.0  999.50  999.00  997.00  997.10  999.00  999.50 1000.00
             *

 97          KK   CPN01COMBINE
 98          HC       2   0.428
             *

 99          KK  N01N02ROUTE
100          KM        Cross-section:  / Manning's N Value: Concrete channel
101          KM        10-ft bottom, with 2:1 side slopes, left and right
102          KM        Mannings N Value: clean earth, straight
103          RS       1    FLOW
104          RC   0.022   0.016   0.022    3902  0.0051    0.00
105          RX  100.00  100.10  112.00  122.00  132.00  142.00  153.90  154.00
106          RY  1300.0 1295.30 1295.00 1290.00 1290.10 1295.00 1295.30 1300.00
             *

107          KK     N02BASIN
108          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
109          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
110          BA   0.510
111          LG    0.20    0.25    5.20    0.33      21
112          UI       0     150     511     824    1102     698     371     157      71      31
113          UI      31       0       0       0       0       0       0       0       0       0
114          UI       0       0       0       0       0       0       0       0       0       0
115          UI       0       0       0       0       0       0       0       0       0       0
116          UI       0       0       0       0       0       0       0       0       0       0
             *

117          KK  DN02REDIVERT
118          KM        Sun City West Expansion Area 2
119          DT    RN02    38.4     0.0
120          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
121          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

122          KK    N03ABASIN
123          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
124          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
125          KM        MICKEN DAM
126          BA   0.065
127          LG    0.33    0.33    4.90    0.29       2
128          UI       0      11      45      81      99      90      62      40      26      18
129          UI      11       7       5       2       3       2       0       0       0       0
130          UI       0       0       0       0       0       0       0       0       0       0
131          UI       0       0       0       0       0       0       0       0       0       0
132          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

133          KK  N3AN02ROUTE
134          KM        Cross-section:  / Manning's N Value: Golf course channel
135          RS      10    FLOW
136          RC   0.025   0.025   0.025    5514  0.0054    0.00
137          RX  100.00  120.00  140.00  180.00  280.00  340.00  360.00  380.00
138          RY  1000.0  998.50  997.40  995.00  995.00  997.70  998.70 1000.00
             *

139          KK   CPN02COMBINE
140          HC       3   1.003
             *

141          KK  N02N3BROUTE
142          KM        Cross-section:  / Manning's N Value: Golf course channel
143          KM        Route is from CPN02 to CPN03B
144          RS       3    FLOW
145          RC   0.025   0.025   0.025    3992  0.0020    0.00
146          RX  100.00  130.00  150.00  155.00  215.00  220.00  230.00  245.00
147          RY  1288.5 1286.00 1283.00 1282.50 1282.60 1283.00 1285.00 1286.00
             *

148          KK    N03BBASIN
149          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
150          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
151          BA   0.285
152          LG    0.23    0.25    4.80    0.36      30
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153          UI       0     109     342     619     573     335     131      58      19      20
154          UI       0       0       0       0       0       0       0       0       0       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          UI       0       0       0       0       0       0       0       0       0       0
             *

158          KK  DN3BREDIVERT
159          KM       Master Drainage Plan for Del Webb's Sun City West - Expansion Area
160          DT   RN03B     8.0     0.0
161          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
162          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

163          KK  CPN03BCOMBINE
164          HC       2   1.288
             *

165          KK  N3BN04ROUTE
166          KM       Cross-section:  / Manning's N Value: Golf course channel
167          KM       Route is from CPN03B to CPN04
168          RS       7    FLOW
169          RC   0.025   0.025   0.025    5663  0.0020    0.00
170          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
171          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

172          KK     N04BASIN
173          KM       BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
174          KM       PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
175          BA   0.992
176          LG    0.21    0.25    5.40    0.29      26
177          UI       0     109     275     516     663     871    1299    1124     873     660
178          UI     493     272     185     123      79      33      34      34      34       0
179          UI       0       0       0       0       0       0       0       0       0       0
180          UI       0       0       0       0       0       0       0       0       0       0
181          UI       0       0       0       0       0       0       0       0       0       0
             *

182          KK     N03BASIN
183          KM       BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
184          KM       PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
185          BA   0.358
186          LG    0.24    0.26    4.65    0.39      27
187          UI       0     105     359     578     774     490     261     110      50      21
188          UI      22       0       0       0       0       0       0       0       0       0
189          UI       0       0       0       0       0       0       0       0       0       0
190          UI       0       0       0       0       0       0       0       0       0       0
191          UI       0       0       0       0       0       0       0       0       0       0
             *

192          KK  DN03REDIVERT
193          KM       Master Drainage Plan for Del Webb's Sun City West - Expansion Area
194          DT    RN03    10.0     0.0
195          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
196          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

197          KK  N03N04ROUTE
198          KM       Cross-section:  / Manning's N Value: Golf course channel
199          RS       8    FLOW
200          RC   0.025   0.025   0.025    7853  0.0035    0.00
201          RX  100.00  140.00  175.00  260.00  350.00  415.50  445.00  475.00
202          RY  1000.0  999.00  998.00  995.00  995.00  998.00  999.00 1000.00
             *

203          KK    N04ABASIN
204          KM       BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
205          KM       PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
206          KM       MICKEN DAM
207          BA   0.199
208          LG    0.34    0.36    5.20    0.25       1
209          UI       0      58     223     361     351     227     133      79      47      28
210          UI      12      10       9       0       0       0       0       0       0       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          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

214          KK  N4AN04ROUTE
215          KM       Cross-section:  / Manning's N Value: Golf course channel
216          KM       Route is from N04A to CPN04
217          RS      10    FLOW
218          RC   0.025   0.025   0.025    7932  0.0044    0.00
219          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
220          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

221          KK    N04BBASIN
222          KM       BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
223          BA   0.131
224          LG    0.34    0.34    4.80    0.30       1
225          UI       0     203     487     217      73      22       0       0       0       0
226          UI       0       0       0       0       0       0       0       0       0       0
227          UI       0       0       0       0       0       0       0       0       0       0
228          UI       0       0       0       0       0       0       0       0       0       0
229          UI       0       0       0       0       0       0       0       0       0       0
             *

230          KK  N4BN04ROUTE
231          KM       Cross-section:  / Manning's N Value: Golf course channel
232          KM       Route is from N04B to CPN04
233          RS       8    FLOW
234          RC   0.025   0.025   0.025    6839  0.0050    0.00
235          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
236          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

237          KK   CPN04COMBINE
238          HC       5   2.968
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 239          KK  DN04REDIVERT
 240          KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
 241          DT    RN04     96.0      0.0
 242          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 243          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 244          KK  N04N05ROUTE
 245          KM        Cross-section:  / Manning's N Value: Golf course channel
 246          RS       6     FLOW
 247          RC   0.025    0.025    0.025    5405  0.0019     0.00
 248          RX  100.00   120.00   136.00   153.00   236.00   253.00   270.00   290.00
 249          RY  1270.5 1268.50 1266.70 1265.00 1264.90 1266.70 1268.50 1270.50
              *

 250          KK     N05BASIN
 251          KM        BASIN BOUNDARY FROM CORTEBELLA MASTER DRAINAGE REPORT, DEI
 252          BA   0.995
 253          LG    0.21     0.19     6.60     0.18       27
 254          UI       0       94      174      388      510      626      795     1151      988      786
 255          UI     624      502      363      200      159      108       86       30       28       29
1                                          HEC-1 INPUT                                                    PAGE  7

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

 256          UI      29       29        0        0        0        0        0        0        0        0
 257          UI       0        0        0        0        0        0        0        0        0        0
 258          UI       0        0        0        0        0        0        0        0        0        0
              *

 259          KK  DN05REDIVERT
 260          KM        First flush volume estimated based on aerial and Preliminary Plat Final
 261          KM        Report for Corte Bella Country Club Phase II
 262          KM        Route through Corte Bella
 263          DT    RN05     15.6      0.0
 264          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 265          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 266          KK   DN07ARETRIEVE
 267          DR  DN07AS
              *

 268          KK  N7AN05ROUTE
 269          KM        Route through Corte Bella
 270          RS      10     FLOW
 271          RC   0.035    0.030    0.035    10408  0.0050     0.00
 272          RX  1000.0 1004.00 1262.00 1272.00 1282.00 1290.00 1296.00 1300.00
 273          RY  1288.0 1286.00 1286.00 1284.00 1283.90 1286.00 1286.00 1288.00
              *

 274          KK   DN07BRETRIEVE
 275          DR  DN07BS
              *

 276          KK  N7BN05ROUTE
 277          KM        Route through Corte Bella
 278          RS      11     FLOW
 279          RC   0.035    0.030    0.035     8067  0.0067     0.00
 280          RX  100.00   120.00   196.00   200.00   300.00   301.00   380.00   400.00
 281          RY  1285.0 1284.00 1281.00 1280.00 1279.90 1281.00 1284.00 1285.00
              *

 282          KK   DN07CRETRIEVE
 283          DR  DN07CS
              *

 284          KK  N7CN05ROUTE
 285          KM        Route through Corte Bella
 286          RS       6     FLOW
 287          RC   0.035    0.030    0.035     6212  0.0050     0.00
 288          RX  1000.0 1004.00 1264.00 1272.00 1282.00 1290.00 1296.00 1300.00
 289          RY  1279.0 1277.00 1277.00 1275.00 1274.90 1277.00 1277.00 1279.00
              *
1                                          HEC-1 INPUT                                                    PAGE  8

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

 290          KK   CPN05COMBINE
 291          HC       5    4.533
              *

 292          KK  N05N06ROUTE
 293          KM        Cross-section:  / Manning's N Value: clean earth, earth
 294          KM        with sparse trees and shrubs, and pavement
 295          RS       1     FLOW
 296          RC   0.032    0.022    0.013     2139  0.0010     0.00
 297          RX  100.00   250.00   306.00   326.00   338.00   360.00   414.00   415.00
 298          RY  1001.0   999.50   999.00   996.00   996.10   999.00   999.50 1002.00
              *

 299          KK     N06BASIN
 300          KM        BASIN BOUNDARY FROM CORTE BELLA, SUN CITY WEST AND MCMICKEN DAM
 301          BA   0.219
 302          LG    0.34     0.34     4.40     0.39        2
 303          UI       0       39      155      270      337      303      206      135       88       60
 304          UI      37       24       14        9        8        9        0        0        0        0
 305          UI       0        0        0        0        0        0        0        0        0        0
 306          UI       0        0        0        0        0        0        0        0        0        0
 307          UI       0        0        0        0        0        0        0        0        0        0
              *

 308          KK   CPN06COMBINE
 309          HC       3    4.752
              *

 310          KK     N08BASIN
 311          KM        BASIN BOUNDARY FROM SUN CITY WEST
 312          BA   1.723
 313          LG    0.21     0.23     6.20     0.21       26
 314          UI       0      137      157      482      653      788      924     1129     1601     1617
 315          UI    1248     1089      868      725      591      341      238      226      137      129
 316          UI      42       42       42       42       42       42        0        0        0        0
 317          UI       0        0        0        0        0        0        0        0        0        0
 318          UI       0        0        0        0        0        0        0        0        0        0
              *

 319          KK     N10BASIN
 320          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
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```
321          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
322          BA   0.638
323          LG    0.21     0.25     4.60     0.43       24
324          UI       0       82      259      433      568      882      875      636      474      314
325          UI     150      111       65       25       26       25        0        0        0        0
326          UI       0        0        0        0        0        0        0        0        0        0
327          UI       0        0        0        0        0        0        0        0        0        0
328          UI       0        0        0        0        0        0        0        0        0        0
             *
1                                          HEC-1 INPUT                                                          PAGE  9

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

329          KK  N10N11ROUTE
330          KM        Cross-section:  / Manning's N Value: Golf course channel, Section E
331          RS       5    FLOW
332          RC   0.025   0.025   0.025    5755  0.0023     0.00
333          RX  100.00  110.00  120.00  140.00  280.00  300.00  310.00  320.00
334          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

335          KK     N11BASIN
336          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
337          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
338          BA   0.699
339          LG    0.22     0.25     5.10     0.33       25
340          UI       0       95      338      534      733     1142      888      651      464      225
341          UI     147       91       29       30       29        0        0        0        0        0
342          UI       0        0        0        0        0        0        0        0        0        0
343          UI       0        0        0        0        0        0        0        0        0        0
344          UI       0        0        0        0        0        0        0        0        0        0
             *

345          KK   CPN11COMBINE
346          HC       2   1.337
             *

347          KK  N11N09ROUTE
348          KM        Cross-section: cross section determined from aerial
349          KM        street section / Manning's N Value: Street
350          RS       3    FLOW
351          RC   0.032   0.013   0.032    9488  0.0029     0.00
352          RX  100.00  100.50  106.00  106.10  150.00  150.10  155.50  156.00
353          RY  1003.0  999.90  999.90  999.30  999.30  999.80 1000.00 1003.00
             *

354          KK     N09BASIN
355          KM        BASIN BOUNDARY FROM SUN CITY WEST
356          BA   0.877
357          LG    0.19     0.25     5.20     0.33       30
358          UI       0       87      178      377      484      616      825     1063      834      662
359          UI     517      405      241      150      120       87       33       27       27       26
360          UI      27        0        0        0        0        0        0        0        0        0
361          UI       0        0        0        0        0        0        0        0        0        0
362          UI       0        0        0        0        0        0        0        0        0        0
             *

363          KK     N14BASIN
364          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
365          KM        MODIFIED FOR AS-BUILT CONDITIONS. APPROXIMATED ON-SITE RETENTION
366          KM        NO TOPO AVAILABLE
367          BA   0.509
368          LG    0.14     0.23     5.40     0.31       18
369          UI       0      110      399      604      993      787      512      268      134       66
370          UI      27       28        0        0        0        0        0        0        0        0
371          UI       0        0        0        0        0        0        0        0        0        0
372          UI       0        0        0        0        0        0        0        0        0        0
1                                          HEC-1 INPUT                                                          PAGE 10

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

373          UI       0        0        0        0        0        0        0        0        0        0
             *

374          KK  DN14REDIVERT
375          KM        Hillcrest Golf Course and Lake
376          KM        No topo available
377          DT    RN14   224.8     0.0
378          DI     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
379          DQ     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

380          KK   CPN09COMBINE
381          HC       3   2.723
             *

382          KK  N09N18ROUTE
383          KM        Cross-section: Street section
384          RS       1    FLOW
385          RC   0.032   0.013   0.032    4145  0.0072     0.00
386          RX  100.00  100.50  105.00  105.50  132.50  133.00  137.50  138.00
387          RY  1004.0  999.90  999.80  999.30  999.29  999.80  999.90 1004.00
             *

388          KK     N18BASIN
389          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
390          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
391          BA   0.441
392          LG    0.24     0.25     5.40     0.27       37
393          UI       0      121      413      650      950      623      367      151       77       25
394          UI      26        0        0        0        0        0        0        0        0        0
395          UI       0        0        0        0        0        0        0        0        0        0
396          UI       0        0        0        0        0        0        0        0        0        0
397          UI       0        0        0        0        0        0        0        0        0        0
             *

398          KK   CPN18COMBINE
399          HC       2   3.164
             *

400          KK  N18N15ROUTE
401          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
402          RS       1    FLOW
403          RC   0.016   0.016   0.016    6125  0.0039     0.00
404          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
405          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
             *

406          KK     N12BASIN
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407          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
408          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
409          BA   0.782
410          LG    0.17    0.15    8.40    0.10      28
411          UI       0      66      91     245     325     398     475     610     837     672
412          UI     550     460     370     297     193     115     109      67      58      20
413          UI      21      20      20      20       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 11

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

414          UI       0       0       0       0       0       0       0       0       0       0
415          UI       0       0       0       0       0       0       0       0       0       0
             *

416          KK  N12N13ROUTE
417          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section H
418          RS       1    FLOW
419          RC   0.016   0.016   0.016    1089  0.0055    0.00
420          RX  100.00  101.00  102.00  109.00  131.00  140.00  141.00  142.00
421          RY  1000.2 1000.10 1000.00  993.50  993.60 1000.00 1000.10 1000.20
             *

422          KK     N13BASIN
423          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
424          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
425          BA   0.724
426          LG    0.22    0.23    6.20    0.20      38
427          UI       0      58      73     211     286     342     408     500     727     654
428          UI     518     445     359     294     220     128     100      82      59      39
429          UI      18      18      18      19      18       0       0       0       0       0
430          UI       0       0       0       0       0       0       0       0       0       0
431          UI       0       0       0       0       0       0       0       0       0       0
             *

432          KK   CPN13COMBINE
433          HC       2   1.506
             *

434          KK  N13N15ROUTE
435          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
436          RS       2    FLOW
437          RC   0.016   0.016   0.016    7633  0.0039    0.00
438          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
439          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
             *

440          KK     N16BASIN
441          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
442          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
443          BA   0.285
444          LG    0.23    0.29    5.10    0.32      35
445          UI       0      88     296     492     619     376     188      82      33      18
446          UI       0       0       0       0       0       0       0       0       0       0
447          UI       0       0       0       0       0       0       0       0       0       0
448          UI       0       0       0       0       0       0       0       0       0       0
449          UI       0       0       0       0       0       0       0       0       0       0
             *

450          KK  N16N15ROUTE
451          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
452          RS       1    FLOW
453          RC   0.016   0.016   0.016    1241  0.0012    0.00
454          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
455          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
             *
1                                          HEC-1 INPUT                                          PAGE 12

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

456          KK     N15BASIN
457          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
458          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
459          BA   0.852
460          LG    0.23    0.25    5.40    0.27      37
461          UI       0     106     324     548     727    1066    1212     871     655     458
462          UI     226     164     106      35      33      32      33       0       0       0
463          UI       0       0       0       0       0       0       0       0       0       0
464          UI       0       0       0       0       0       0       0       0       0       0
465          UI       0       0       0       0       0       0       0       0       0       0
             *

466          KK   CPN15COMBINE
467          HC       4   5.807
             *

468          KK  N15N17ROUTE
469          KM        Cross-section: From Sun City West Development Master Plan
470          RS       1    FLOW
471          RC   0.016   0.016   0.016    3182  0.0031    0.00
472          RX  100.00  101.00  101.50  108.00  140.00  147.50  149.00  150.00
473          RY  1000.0  999.90  999.80  993.00  992.90  999.80  999.90 1000.00
             *

474          KK     N17BASIN
475          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
476          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
477          BA   1.291
478          LG    0.22    0.25    5.40    0.28      29
479          UI       0     125     245     530     691     855    1107    1555    1250     998
480          UI     790     631     417     221     198     126      79      39      38      38
481          UI      39       0       0       0       0       0       0       0       0       0
482          UI       0       0       0       0       0       0       0       0       0       0
483          UI       0       0       0       0       0       0       0       0       0       0
             *

484          KK   CPN17COMBINE
485          HC       2   7.098
             *

486          KK     N20BASIN
487          KM        BASIN BOUNDARY FROM APS YARD AND ATSF RR ALIGNMENT
488          BA   0.088
489          LG    0.17    0.28    5.40    0.29      41
490          UI       0      72     228     245      98      27       8       0       0       0
491          UI       0       0       0       0       0       0       0       0       0       0
492          UI       0       0       0       0       0       0       0       0       0       0
493          UI       0       0       0       0       0       0       0       0       0       0
494          UI       0       0       0       0       0       0       0       0       0       0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

495             KK  N20N21ROUTE
496             KM        Cross-section: estimated from aerial
497             KM        Manning's N Value: clean earth
498             RS       3    FLOW
499             RC   0.022   0.022   0.022    5119  0.0043    0.00
500             RX  100.00  101.00  102.00  114.00  188.00  200.00  203.00  206.00
501             RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.50 1001.00
                *

502             KK     N21BASIN
503             KM        BASIN BOUNDARY FROM VASQUEZ CRT AND ATSF RR ALIGNMENT
504             BA   0.193
505             LG    0.24    0.18    6.80    0.16      35
506             UI       0      60     198     330     415     257     132      56      24      12
507             UI       0       0       0       0       0       0       0       0       0       0
508             UI       0       0       0       0       0       0       0       0       0       0
509             UI       0       0       0       0       0       0       0       0       0       0
510             UI       0       0       0       0       0       0       0       0       0       0
                *

511             KK   CPN21COMBINE
512             HC       2   0.281
                *

513             KK  DN21SEDIVERT
514             KM        Split based on ADMS for Old Town Site and 30% ADMP
515             KM        dated 7-24-07 prepared by Neals Engineering
516             DT   DN21S     0.0     0.0
517             DI     0.0   688.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
518             DQ     0.0   255.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

519             KK  N21N25ROUTE
520             KM        Cross-section: cross section based on aerial
521             KM        Manning's N Value: earth with sparse trees and shrubs
522             RS       4    FLOW
523             RC   0.032   0.032   0.032    7742  0.0057    0.00
524             RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
525             RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
                *

526             KK     N22BASIN
527             KM        BASIN BOUNDRY FROM NORTH EL MIRAGE AND NORTH SURPRISE DEV
528             BA   0.108
529             LG    0.25    0.25    6.00    0.21      31
530             UI       0      75     219     317     155      48      14       0       0       0
531             UI       0       0       0       0       0       0       0       0       0       0
532             UI       0       0       0       0       0       0       0       0       0       0
533             UI       0       0       0       0       0       0       0       0       0       0
534             UI       0       0       0       0       0       0       0       0       0       0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

535             KK  DN21SERETRIEVE
536             DR   DN21S
                *

537             KK  N21N22ROUTE
538             KM        Cross-section: cross section estimated from aerial
539             KM        Manning's N Value: street, clean earth
540             RS       1    FLOW
541             RC   0.022   0.013   0.022    1624  0.0062    0.00
542             RX  100.00  105.00  115.00  115.10  155.00  155.10  165.00  170.00
543             RY  1000.0  999.60  999.50  999.00  999.10  999.50  999.60 1000.00
                *

544             KK   CPN22COMBINE
545             HC       2   0.389
                *

546             KK  N22N25ROUTE
547             KM        Cross-section: cross section based on aerial
548             KM        Manning's N Value: earth with sparse trees and shrubs
549             RS       4    FLOW
550             RC   0.032   0.032   0.032    6306  0.0056    0.00
551             RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
552             RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
                *

553             KK     N25BASIN
554             KM        BASIN BOUNDARY FROM THOMPSON RANCH
555             KM        BNSF RAIL YARD AND ATSF RR ALIGNMENT
556             BA   0.491
557             LG    0.27    0.29    4.15    0.51      25
558             UI       0      79     325     481     750     837     558     374     178     103
559             UI      52      24      24       0       0       0       0       0       0       0
560             UI       0       0       0       0       0       0       0       0       0       0
561             UI       0       0       0       0       0       0       0       0       0       0
562             UI       0       0       0       0       0       0       0       0       0       0
                *

563             KK   CPN25COMBINE
564             HC       3    0.88
                *

565             KK  N25N26ROUTE
566             KM        Cross-section:Based on aerial and site visit
567             KM        Manning's N Value: Clean earth
568             RS       2    FLOW
569             RC   0.022   0.022   0.022    2815  0.0010    0.00
570             RX  100.00  103.00  105.00  120.00  200.00  206.00  220.00  250.00
571             RY  1116.2 1116.10 1116.00 1106.00 1105.90 1116.00 1116.50 1120.00
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

572             KK     N26BASIN
573             KM        BASIN BOUNDARY FROM ROCK QUARY, AGUA FRIA RIVER AND ATSF RR ALIGNMENT
574             BA   0.257
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575          LG    0.33    0.34    2.86    0.86       3
576          UI       0     30      82     151     192     266     369     272     214     157
577          UI     102      53      39      25       9      10       9       9       0       0
578          UI       0       0       0       0       0       0       0       0       0       0
579          UI       0       0       0       0       0       0       0       0       0       0
580          UI       0       0       0       0       0       0       0       0       0       0
             *

581          KK   CPN26COMBINE
582          HC       2   1.137
             *

583          KK     N19BASIN
584          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
585          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
586          BA   0.176
587          LG    0.22    0.15    9.70    0.06      39
588          UI       0     164     517     464     162      39       0       0       0       0
589          UI       0       0       0       0       0       0       0       0       0       0
590          UI       0       0       0       0       0       0       0       0       0       0
591          UI       0       0       0       0       0       0       0       0       0       0
592          UI       0       0       0       0       0       0       0       0       0       0
             *

593          KK     N23BASIN
594          KM        BASIN BOUNDARY FROM BELL RD TOWN CENTER
595          KM        NORTH SURPRISE, BELL COMMERC DEVLP
596          BA   0.517
597          LG    0.23    0.28    5.70    0.24      36
598          UI       0     156     529     863    1117     698     358     154      66      32
599          UI       0       0       0       0       0       0       0       0       0       0
600          UI       0       0       0       0       0       0       0       0       0       0
601          UI       0       0       0       0       0       0       0       0       0       0
602          UI       0       0       0       0       0       0       0       0       0       0
             *

603          KK  N23N24ROUTE
604          KM        Cross-section:  / Manning's N Value: Grouted rip rap bottom
605          KM        earth with sparse trees and shrubs (sideslopes)
606          RS       1    FLOW
607          RC   0.032   0.032   0.032    4874  0.0041    0.00
608          RX  100.00  143.80  154.00  162.60  181.30  201.40  228.20  229.00
609          RY  1154.0 1152.00 1150.00 1148.00 1147.90 1150.00 1152.00 1152.20
             *

610          KK     N24BASIN
611          KM        BASIN BOUNDARY FROM MOBILE HOME PARK
612          KM        3J'S COUNTRY ESTATES, ROCK QUARY AND AGUA FRIA RIVER
613          BA   0.254
614          LG    0.28    0.28    4.45    0.40      18
615          UI       0      84     270     464     544     330     153      69      26      16
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

616          UI       0       0       0       0       0       0       0       0       0       0
617          UI       0       0       0       0       0       0       0       0       0       0
618          UI       0       0       0       0       0       0       0       0       0       0
619          UI       0       0       0       0       0       0       0       0       0       0
             *

620          KK   CPN24COMBINE
621          HC       2   0.771
             *

622          KK     N27BASIN
623          KM        BASIN BOUNDARY FROM ROCK QUARY, AGUA FRIA RIVER AND ATSF RR ALIGNMENT
624          BA   0.126
625          LG    0.35    0.35    2.80    0.90       0
626          UI       0      34     115     180     271     181     107      45      24       7
627          UI       8       0       0       0       0       0       0       0       0       0
628          UI       0       0       0       0       0       0       0       0       0       0
629          UI       0       0       0       0       0       0       0       0       0       0
630          UI       0       0       0       0       0       0       0       0       0       0
             *

631          KK   DUMMYCOMBINE
632          HC       4
             *

633          KK   DUMMYCOMBINE
634          HC       4
             *

635          KK     D03BASIN
636          KM        BASIN BOUNDARY FROM KINGSWOOD PARKE
637          BA   0.723
638          LG    0.23    0.25    4.80    0.37      35
639          UI       0     121     484     719    1140    1220     811     548     245     149
640          UI      70      36      35       0       0       0       0       0       0       0
641          UI       0       0       0       0       0       0       0       0       0       0
642          UI       0       0       0       0       0       0       0       0       0       0
643          UI       0       0       0       0       0       0       0       0       0       0
             *

644          KK  DD03REDIVERT
645          KM        Master Drainage Report Update for Kingswood Parke Phase One
646          KM        (excess retention provided for future development was
647          KM        subtracted from total retenttion provided)
648          DT    RD03    51.7     0.0
649          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
650          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

651          KK  D03D04ROUTE
652          KM        Cross-section: Cross-section determined from aerial
653          KM        Manning's N Value: street and earth with sparse trees and shrubs
654          RS       4    FLOW
655          RC   0.032   0.013   0.032    4458  0.0038    0.00
656          RX  100.00  108.00  119.00  119.10  155.00  155.10  160.00  165.00
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

657          RY  1000.3 1000.00  999.50  999.00  999.70 1000.20 1000.30 1000.40
             *

658          KK     D04BASIN
659          KM        BASIN BOUNDARY FROM GRAND VILLAGE NORTH/SOUTH, BELLAZANO CONDOS,
660          KM        HOPI VILLAGE, PIMA VILLAGE, SUN VILLAGE, ZUNI VILLAGE, PUEBLO VILLAGE,
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661          KM        GRAND AVE PROFF PLAZA AND GRAND AVE CHANNEL
662          BA   0.891
663          LG    0.22     0.27     5.70     0.25       36
664          UI       0      122      430      681      934     1456     1132      830      591      287
665          UI     186      117       37       38       38        0        0        0        0        0
666          UI       0        0        0        0        0        0        0        0        0        0
667          UI       0        0        0        0        0        0        0        0        0        0
668          UI       0        0        0        0        0        0        0        0        0        0
             *

669          KK  DD04REDIVERT
670          KM        Master Drainage Report Update for Kingswood Parke Phase One (Sun Village
671          KM        Final Drainage Report for Grand Village Center Phase 6, Drainage Report
672          KM        Grand Point Plaza, Final Drainage Report -Revised  For Grand Pointe
673          KM        Plaza Montessori of Surprise SP06-41
674          DT    RD04     46.9      0.0
675          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
676          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

677          KK   CPD04COMBINE
678          HC       2    1.614
             *

679          KK  DD04SEDIVERT
680          KM        Split flow Bell Rd at Litchfield Rd intersection
681          DT   DD04S      0.0      0.0
682          DI     0.0     86.1    158.5    512.0    904.0   1940.0      0.0      0.0      0.0      0.0
683          DQ     0.0      0.0     42.4    259.0    534.0   1278.0      0.0      0.0      0.0      0.0
             *

684          KK  D04D05ROUTE
685          KM        Cross-section: Cross-section determined from aerial
686          KM        Manning's N Value: street and earth with sparse trees and shrubs
687          RS       3    FLOW
688          RC   0.032    0.013    0.013     2993   0.0027     0.00
689          RX  100.00   119.00   135.00   135.10   180.00   180.10   181.00   182.00
690          RY  1000.0   999.80   999.50   999.00   999.80  1000.30  1000.40  1000.50
             *

691          KK     D05BASIN
692          KM        BASIN BOUNDARY FROM WAL MART STORE
693          KM        SURPRISE TOWN CENTER AND GRAND AVE CHANNEL
694          BA   0.163
695          LG    0.11     0.26     4.90     0.39       73
696          UI       0      126      392      467      196       58       15        0        0        0
697          UI       0        0        0        0        0        0        0        0        0        0
698          UI       0        0        0        0        0        0        0        0        0        0
699          UI       0        0        0        0        0        0        0        0        0        0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

700          UI       0        0        0        0        0        0        0        0        0        0
             *

701          KK  DD05REDIVERT
702          KM        West Point Towne Center Final Master Infrastructure Drainage Report
703          DT    RD05      8.2      0.0
704          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
705          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

706          KK   CPD05COMBINE
707          HC       2    1.777
             *

708          KK  D05D14ROUTE
709          KM        Cross-section: Cross-section determined from aerial, assumed
710          KM        3' depth / Manning's N Value: earth with grass and forbs
711          RS       2    FLOW
712          RC   0.032    0.032    0.032     3385  0.0053     0.00
713          RX  100.00   101.00   102.00   122.00   142.00   162.00   163.00   164.00
714          RY  1000.0   999.90   999.80   996.80   996.70   999.80   999.90  1000.00
             *

715          KK   DD141DIVERT
716          KM
717          DT  DD141S      0.0      0.0
718          DI     0.0    122.0    500.0   1000.0      0.0      0.0      0.0      0.0      0.0      0.0
719          DQ     0.0      0.0    378.0    878.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

720          KK  D05D15ROUTE
721          KM        Cross-section: Cross-section determined from aerial, assumed
722          KM        3' depth  / Manning's N Value: concrete
723          RS       8    FLOW
724          RC   0.016    0.016    0.016     4588  0.0044     0.00
725          RX  100.00   101.00   102.00   127.00   131.00   140.00   141.00   142.00
726          RY  1000.0   999.90   999.80   996.80   996.70   999.80   999.90  1000.00
             *

727          KK     D11BASIN
728          KM        BASIN BOUNDARY FROM ORCHIDS DEVELOPMENT
729          KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
730          BA   0.662
731          LG    0.25     0.25     5.60     0.26       37
732          UI       0       78      212      387      495      687      946      705      551      403
733          UI     262      136      100       67       24       24       24       24        0        0
734          UI       0        0        0        0        0        0        0        0        0        0
735          UI       0        0        0        0        0        0        0        0        0        0
736          UI       0        0        0        0        0        0        0        0        0        0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

737          KK  DD11REDIVERT
738          KM        Final Drainage Report for Parkway Bank, Drainage Report for Deer Valley
739          KM        Credit Union Final Drainage Report for Jiffy Lube at Bell and Reems
740          KM        for The Orchard Estates Apartments, Drainage Report
741          KM        for Mountainside Fitness Center Lot 7 a
742          DT    RD11     32.4      0.0
743          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
744          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

745          KK   DD111DIVERT
746          KM        Greenway at Parkview intersection split flow
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747          DT  DD111S      0.0      0.0
748          DI     0.0     33.8    453.4   1486.3   2998.5      0.0      0.0      0.0      0.0      0.0
749          DQ     0.0     25.6    376.5   1210.3   2419.3      0.0      0.0      0.0      0.0      0.0
             *

750          KK   DD112DIVERT
751          KM        Greenway at Parkview intersection split flow
752          DT  DD112S      0.0      0.0
753          DI     0.0      8.2     77.0    276.0    579.1      0.0      0.0      0.0      0.0      0.0
754          DQ     0.0      5.4     35.1     78.9    133.0      0.0      0.0      0.0      0.0      0.0
             *

755          KK  D11D12ROUTE
756          KM        Cross-section: Cross-section determined from aerial
757          KM        Manning's N Value: clean earth; straight
758          RS       2    FLOW
759          RC   0.022   0.022   0.022    2668  0.0037    0.00
760          RX  100.00  124.00  154.00  155.00  156.00  157.00  158.00  159.00
761          RY  1208.0 1203.00 1208.00 1208.10 1208.20 1208.30 1208.40 1208.50
             *

762          KK     D12BASIN
763          KM        BASIN BOUNDARY FROM ORCHIDS PARK
764          KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
765          BA   0.347
766          LG    0.24    0.25    5.80    0.28      33
767          UI       0      27      26      54     113     153     167     209     226     221
768          UI     210     186     199     137     146     103      84      79      60      46
769          UI      39      33      26      25      19      15      15      14       4       4
770          UI       3       3       3       4       3       3       4       3       3       4
771          UI       3       3       4       3       0       0       0       0       0       0
             *

772          KK  DD12REDIVERT
773          KM        Final Drainage Report for Residence Inn by Marriot
774          KM        Final Drainage Report for The Orchards Parcel 5
775          KM        (Includes Parcels 9,11,12 and 1/2 of 8), Final Drainage Report for
776          KM        Stadium Village (South) Residences
777          KM        Final Drainage Report for Stadium Village Residences
778          DT    RD12    15.3     0.0
779          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
780          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

781          KK   CPD12COMBINE
782          HC       2   1.009
             *

783          KK   DD121DIVERT
784          KM        Greenway at Bullard intersection split flow
785          DT  DD121S      0.0      0.0
786          DI     0.0     68.7    371.0   1186.5   2407.4      0.0      0.0      0.0      0.0      0.0
787          DQ     0.0     19.7    166.4    705.0   1553.4      0.0      0.0      0.0      0.0      0.0
             *

788          KK   DD122DIVERT
789          KM        Greenway at Bullard intersection split flow
790          DT  DD122S      0.0      0.0
791          DI     0.0     48.9    204.6    481.5    854.0      0.0      0.0      0.0      0.0      0.0
792          DQ     0.0     24.3     82.0    159.0    251.4      0.0      0.0      0.0      0.0      0.0
             *

793          KK  D12D13ROUTE
794          KM        Cross-section: determined from aerial and contours
795          KM        Manning's N Value: earth with sparse trees and shrubs for left
796          KM        overbank and main channel, right overbank is pavement
797          RS      10    FLOW
798          RC   0.032   0.032   0.013    5345  0.0031    0.00
799          RX  100.00  100.10  100.20  155.00  198.00  205.00  215.00  220.00
800          RY  1000.2 1000.10 1000.00  998.00  998.40  998.50  998.60  998.70
             *

801          KK     D13BASIN
802          KM        BASIN BOUNDARY FROM GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
803          BA   1.030
804          LG    0.29    0.33    4.90    0.31      17
805          UI       0     186     641    1123    1453    1310    1091     761     497     291
806          UI     194     141      97      46      22      22      21      22      21      22
807          UI       0       0       0       0       0       0       0       0       0       0
808          UI       0       0       0       0       0       0       0       0       0       0
809          UI       0       0       0       0       0       0       0       0       0       0
             *

810          KK  DD13REDIVERT
811          KM        Final Drainage Report for Surprise Festival, Final Drainage Report
812          KM        for The City at Surprise Office Building, Final Drainage Report for
813          KM        Surprise Tennis Center, Final Drainage Report for City of Surprise
814          KM        Central Utility Plant, Final Drainage Report for Hear
815          DT    RD13    17.1     0.0
816          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
817          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

818          KK  DD04SERETRIEVE
819          DR   DD04S
             *

820          KK  D04D13ROUTE
821          KM        Cross-section: Cross-section determined from aerial
822          KM        Manning's N Value: Natural desert wash, sheet flow
823          RS      13    FLOW
824          RC   0.040   0.040   0.040    5483  0.0031    0.00
825          RX  100.00  101.00  102.00  150.00  155.00  700.00  710.00  720.00
826          RY  1000.0  999.90  999.80  997.80  997.90  999.80  999.90 1000.00
             *

827          KK   CPD13COMBINE
828          HC       3   3.653
             *

829          KK   DD131DIVERT
830          KM        Greenway at Litchfield intersection split flow
```

```
831          DT  DD131S      0.0      0.0
832          DI     0.0    519.2    917.3   1650.7   2842.4      0.0      0.0      0.0      0.0      0.0
833          DQ     0.0     18.8    121.1    423.4    996.3      0.0      0.0      0.0      0.0      0.0
             *

834          KK   DD132DIVERT
835          KM        Greenway at Litchfield intersection split flow
836          DT  DD132S      0.0      0.0
837          DI     0.0    500.4    796.2   1227.2   1846.1      0.0      0.0      0.0      0.0      0.0
838          DQ     0.0    112.4    318.0    584.2    899.4      0.0      0.0      0.0      0.0      0.0
             *

839          KK  D13D14ROUTE
840          KM        Cross-section: Cross-section determined from FCDMC 69
841          KM        Manning's N Value: earth with grass and forbs
842          RS       5    FLOW
843          RC   0.025    0.025    0.025     5304   0.0015     0.00
844          RX  100.00   120.00   122.40   140.40   158.40   176.40   176.80   196.80
845          RY  1175.5 1175.40 1175.00 1172.00 1171.90 1175.00 1175.40 1175.50
             *

846          KK     D14BASIN
847          KM        BASIN BOUNDARY FROM WEST POINT DEVELOPMENT AND GRANDE AVE CHANNEL
848          BA   0.942
849          LG    0.23     0.26     5.10     0.32       37
850          UI       0      114      330      577      752     1087     1356      973      755      543
851          UI     302      194      122       65       36       35       35        0        0        0
852          UI       0        0        0        0        0        0        0        0        0        0
853          UI       0        0        0        0        0        0        0        0        0        0
854          UI       0        0        0        0        0        0        0        0        0        0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

855          KK  DD14REDIVERT
856          KM        West Point Towne Center Final Master Infrastructure Drainage Report
857          DT    RD14     63.4      0.0
858          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
859          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

860          KK   DD141RETRIEVE
861          DR  DD141S
             *

862          KK  D0514AROUTE
863          KM        Cross-section: Cross-section determined from aerial
864          KM        Manning's N Value: street and ROW
865          KM        Route is from DD141 diversion to CPD14
866          RS       3    FLOW
867          RC   0.032    0.013    0.032     3147   0.0051     0.00
868          RX  100.00   120.00   140.00   140.10   200.00   200.10   220.00   240.00
869          RY  1000.0   999.50 1000.00   999.50   999.50 1000.00   999.50 1000.00
             *

870          KK   CPD14COMBINE
871          HC       3    4.758
             *

872          KK   SRD14STORAGE
873          KM        Storage in basin at Greenway and Dysart
874          KM        Volume estimated from topo
875          KO
876          RS       1    STOR
877          SV            0.30     4.10    17.00    40.40    95.20
878          SQ           23.60    83.80   162.00   645.50  2369.50
879          SE  1164.0 1165.00 1166.00 1167.00 1168.00 1169.00
880          ST
             *

881          KK   DD142DIVERT
882          KM        Greenway at Dysart intersection split flow
883          DT  DD142S      0.0      0.0
884          DI     0.0    295.5    693.0   1325.3   2531.5      0.0      0.0      0.0      0.0      0.0
885          DQ     0.0    269.3    457.1    770.3   1405.9      0.0      0.0      0.0      0.0      0.0
             *

886          KK  D14D15ROUTE
887          KM        Cross section: Cross-section determined from  aerial, 1/2 street section
888          KM        Manning's N Value: street, clean earth
889          RS       3    FLOW
890          RC   0.022    0.013    0.013     3351   0.0029     0.00
891          RX  100.00   100.10   110.00   110.10   120.00   125.00   133.90   134.00
892          RY  1003.0   999.80   999.70   999.20   999.40   999.50   999.70 1000.50
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

893          KK     D15BASIN
894          KM        BASIN BOUNDARY FROM SUCCESS SCHOOL
895          BA   0.220
896          LG    0.19     0.15     7.00     0.15       52
897          UI       0      100      309      559      405      208       75       26       16        0
898          UI       0        0        0        0        0        0        0        0        0        0
899          UI       0        0        0        0        0        0        0        0        0        0
900          UI       0        0        0        0        0        0        0        0        0        0
901          UI       0        0        0        0        0        0        0        0        0        0
             *

902          KK   CPD15COMBINE
903          HC       3    4.978
             *

904          KK  D15D26ROUTE
905          KM        Cross-section: Concrete channel along Grand Ave, assumed slope
906          KM        2:1 slide slopes, width and geometry based on aerial
907          RS       3    FLOW
908          RC   0.016    0.016    0.016     9949   0.0050     0.00
909          RX  100.00   112.00   122.00   134.00   145.00   157.00   169.00   185.00
910          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.20 1040.60
             *

911          KK  D15D28ROUTE
912          KM        Channel along Grand Avenue
913          KM        Flow in basin D26 does not enter channel
914          RS       2    FLOW
```

```
 915          RC   0.016   0.016   0.016    7000  0.0050    0.00
 916          RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
 917          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.20 1040.60
              *

 918          KK     D28BASIN
 919          KM        BASIN BOUNDARY FROM EL MIRAGE TR 1-3 AND GRAND AVE CHANNEL
 920          BA   0.255
 921          LG    0.22    0.25    4.50    0.44      36
 922          UI       0     121     375     665     462     221      83      25      19       0
 923          UI       0       0       0       0       0       0       0       0       0       0
 924          UI       0       0       0       0       0       0       0       0       0       0
 925          UI       0       0       0       0       0       0       0       0       0       0
 926          UI       0       0       0       0       0       0       0       0       0       0
              *

 927          KK   CPD28COMBINE
 928          HC       2   5.233
              *

 929          KK  D28AFRROUTE
 930          KM        Direct discharge into Agua Fria River, field verified by FCDMC
 931          RS       1    FLOW
 932          RC   0.016   0.016   0.016    2990  0.0050    0.00
 933          RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
 934          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.20 1040.60
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 935          KK     D26BASIN
 936          KM        BASIN BOUNDARY FROM RACHO EL MIRAGE, SCHOOL
 937          KM        MOBILE HOME PARK, SUNWEST CEMETARY AND GRAND AVE CHANNEL
 938          BA   0.642
 939          LG    0.24    0.25    5.80    0.24      34
 940          UI       0     163     566     876    1350     940     579     247     140      44
 941          UI      37       0       0       0       0       0       0       0       0       0
 942          UI       0       0       0       0       0       0       0       0       0       0
 943          UI       0       0       0       0       0       0       0       0       0       0
 944          UI       0       0       0       0       0       0       0       0       0       0
              *

 945          KK  DD26REDIVERT
 946          KM        Retention volume estimated based on aerial
 947          DT    RD26     52.4     0.0
 948          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 949          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 950          KK   DD142RETRIEVE
 951          DR  DD142S
              *

 952          KK  D14D26ROUTE
 953          KM        Cross-section: Cross-section from Lower El Mirage Channelization
 954          KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
 955          RS       3    FLOW
 956          RC   0.022   0.022   0.022    5050  0.0048    0.00
 957          RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
 958          RY  1000.0  999.50  999.00  991.00  991.10  999.00  999.80 1000.00
              *

 959          KK   CPD26COMBINE
 960          HC       2     5.4
              *

 961          KK  D26D27ROUTE
 962          KM        Cross-section: Cross-section determined from FCDMC 18
 963          KM        Manning's N Value: Clean earth
 964          RS       1    FLOW
 965          RC   0.022   0.022   0.022    2050  0.0039    0.00
 966          RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
 967          RY  1000.0  999.50  999.00  991.00  991.00  999.00  999.50 1000.00
              *

 968          KK     D27BASIN
 969          KM        BASIN BOUNDARY FROM RANCHO EL MIRAGE
 970          KM        WEST EL MIRAGE AND BNSF RR ALIGNMENT
 971          BA   0.316
 972          LG    0.20    0.24    4.90    0.35      42
 973          UI       0     101     334     573     674     411     197      89      33      20
 974          UI       0       0       0       0       0       0       0       0       0       0
 975          UI       0       0       0       0       0       0       0       0       0       0
 976          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 977          UI       0       0       0       0       0       0       0       0       0       0
              *

 978          KK  DD27REDIVERT
 979          KM        Retention volume estimated based on aerial
 980          DT    RD27      8.2     0.0
 981          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 982          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 983          KK   CPD27COMBINE
 984          HC       2   5.716
              *

 985          KK   SRD27STORAGE
 986          KM        Storage at culvert under TB Road
 987          KO
 988          RS       1    STOR
 989          SV                                                  22.80   51.41
 990          SQ           52.00  202.00  415.00  658.00  906.00 1127.00 2999.00
 991          SE  1140.0 1142.00 1144.00 1146.00 1148.00 1150.00 1152.00 1154.00
 992          ST
              *

 993          KK  D27D42ROUTE
 994          KM        Cross-section: Cross-section determined from Waddell Road
 995          KM        Drainage Improvement CAR Final by HDR
 996          KM        dated April 10, 2009, RLE2
 997          RS       5    FLOW
 998          RC   0.030   0.030   0.030    5599  0.0020    0.00
```

```
 999          RX    0.00   24.40   34.40   44.40   54.40   64.40   74.40   98.80
1000          RY  1128.5 1122.40 1122.40 1122.40 1122.40 1122.40 1122.40 1128.50
              *

1001          KK     D20BASIN
1002          KM        BASIN BOUNDARY FROM COUNTRYSIDE UNITS 1-4 AND COTTON GIN
1003          BA   0.498
1004          LG    0.26    0.26    4.65    0.39      30
1005          UI       0      67     234     367     503     791     641     472     341     178
1006          UI     111      68      25      20      21       0       0       0       0       0
1007          UI       0       0       0       0       0       0       0       0       0       0
1008          UI       0       0       0       0       0       0       0       0       0       0
1009          UI       0       0       0       0       0       0       0       0       0       0
              *

1010          KK  DD20REDIVERT
1011          KM        Final Drainage Report Greenway Marketplace Wal-mart Neighborhood
1012          KM        Market #4218-00, Drainage Report for Countryside Elementary School, Ash
1013          KM        Ranch Water Supply Facility Expansion, Countryside - Preliminary Drainag
1014          KM        Report, Final Drainage Report for Cotton Gin
1015          DT    RD20    38.1     0.0
1016          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1017          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
```



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

1018          KK   DD111RETRIEVE
1019          DR  DD111S
              *

1020          KK  D11D20ROUTE
1021          KM        Cross-section: Cross-section determined from aerial
1022          KM        Manning's N Value: retention basins, earth w/ grass
1023          RS       5    FLOW
1024          RC   0.025   0.025   0.025    6256  0.0032    0.00
1025          RX  100.00  101.00  102.00  114.00  190.00  202.00  203.00  204.00
1026          RY  1000.2 1000.10 1000.00  997.00  996.90 1000.00 1000.10 1000.20
              *

1027          KK   CPD20COMBINE
1028          HC       2    1.16
              *

1029          KK  D20D21ROUTE
1030          KM        Cross-section:  / Manning's N Value: street and earth with sparse
1031          KM        trees and shrubs
1032          RS       6    FLOW
1033          RC   0.032   0.032   0.013    5323  0.0023    0.00
1034          RX  100.00  100.50  112.00  150.00  162.00  198.00  198.00  220.00
1035          RY  1000.1 1000.00  997.00  997.00 1000.00  999.50  998.90  999.40
              *

1036          KK     D21BASIN
1037          KM        BASIN BOUNDARY FROM ASHTON RANCH MULTI UNITS
1038          BA   0.496
1039          LG    0.25    0.25    4.65    0.39      32
1040          UI       0      63     199     330     436     672     687     496     370     250
1041          UI     123      87      55      19      20      19       0       0       0       0
1042          UI       0       0       0       0       0       0       0       0       0       0
1043          UI       0       0       0       0       0       0       0       0       0       0
1044          UI       0       0       0       0       0       0       0       0       0       0
              *

1045          KK  DD21REDIVERT
1046          KM        Final Drainage Report for Ashton Ranch Unit 3, Final Drainage Report for
1047          KM        Ashton Ranch Unit 1, Final Drainage Report for Ashton Ranch Unit 2, Fina
1048          KM        Drainage Report for Ashton Ranch Unit 4
1049          DT    RD21    39.9     0.0
1050          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1051          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1052          KK   DD112RETRIEVE
1053          DR  DD112S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1054          KK  D11D21ROUTE
1055          KM        Cross-section: determined from aerial, street section through subdivisio
1056          KM        Manning's N Value: street, earth with sparse trees and shrubs
1057          RS      10    FLOW
1058          RC   0.032   0.013   0.032    8031  0.0035    0.00
1059          RX  100.00  106.00  115.00  115.10  167.00  167.10  174.00  179.00
1060          RY  1000.0  999.80  999.50  999.00  998.90  999.50  999.80 1000.00
              *

1061          KK   DD121RETRIEVE
1062          DR  DD121S
              *

1063          KK  D12D21ROUTE
1064          KM        Cross-section: Cross-section determined from aerial
1065          KM        Manning's N Value: street and earth with sparse trees and shrubs
1066          RS       2    FLOW
1067          RC   0.013   0.013   0.032    2810  0.0078    0.00
1068          RX  100.00  105.00  110.00  115.00  140.00  140.10  176.00  177.00
1069          RY  1000.0  999.90  999.80  999.70  999.20  999.70  999.80 1000.00
              *

1070          KK   CPD21COMBINE
1071          HC       4   2.003
              *

1072          KK   DD211DIVERT
1073          KM        Waddell at Bullard split flow
1074          DT  DD211S     0.0     0.0
1075          DI     0.0   184.9   770.2  1884.9  3510.6     0.0     0.0     0.0     0.0     0.0
1076          DQ     0.0   139.4   462.9  1049.1  1871.4     0.0     0.0     0.0     0.0     0.0
              *

1077          KK   DD212DIVERT
1078          KM        Waddell at Bullard split flow
1079          DT  DD212S     0.0     0.0
1080          DI     0.0    45.5   307.3   835.8  1639.2     0.0     0.0     0.0     0.0     0.0
```

```
1081        DQ     0.0    36.2   111.1   209.5   326.8     0.0     0.0     0.0     0.0     0.0
            *

1082        KK  D21D22ROUTE
1083        KM        Cross-section: Cross-section determined from aerial
1084        KM        Manning's N Value: earth with grass and forbs (main channel)
1085        KM        earth with sparse trees and shrubs (overbanks)
1086        RS       4    FLOW
1087        RC   0.032   0.025   0.032    2720  0.0029    0.00
1088        RX  100.00  103.00  105.00  116.00  151.00  160.00  165.00  170.00
1089        RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
            *
1                                          HEC-1 INPUT                                          PAGE 28

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

1090        KK     D22BASIN
1091        KM        BASIN BOUNDARY FROM ROYAL RANCH UNIT I AND II
1092        BA   0.454
1093        LG    0.24    0.25    4.70    0.37      32
1094        UI       0      63     233     357     500     764     567     411     284     135
1095        UI      87      50      20      20      20       0       0       0       0       0
1096        UI       0       0       0       0       0       0       0       0       0       0
1097        UI       0       0       0       0       0       0       0       0       0       0
1098        UI       0       0       0       0       0       0       0       0       0       0
            *

1099        KK  DD22REDIVERT
1100        KM        Drainage Report for Royal Ranch Unit 2 (Basins P1&N in D23), Final Drain
1101        KM        Report for Royal Ranch Unit 2, Parcel 5, Final Drainage Report for Royal
1102        KM        Unit 2 Parcel 8, portion estimated by aerial for Del Webb
1103        DT    RD22    37.5     0.0
1104        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1105        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1106        KK   DD122RETRIEVE
1107        DR  DD122S
            *

1108        KK  D12D22ROUTE
1109        KM        Cross-section: Cross section determined from aerial
1110        KM        Manning's N Value: street and earth with sparse trees and shrubs
1111        RS       7    FLOW
1112        RC   0.032   0.013   0.013    7744  0.0040    0.00
1113        RX  100.00  105.00  145.00  145.10  160.00  174.00  178.00  180.00
1114        RY  1000.0  999.90  999.50  999.00  999.20  999.50  999.60  999.70
            *

1115        KK   CPD22COMBINE
1116        HC       3   2.457
            *

1117        KK  D22D23ROUTE
1118        KM        Cross-section: Cross-section determined from aerial
1119        KM        Manning's N Value: earth with sparse trees and shrubs/ riprap
1120        RS       2    FLOW
1121        RC   0.032   0.032   0.032    2705  0.0037    0.00
1122        RX  100.00  104.00  106.00  110.00  118.00  122.00  126.00  138.00
1123        RY  1161.0 1160.00 1159.00 1158.00 1158.10 1159.00 1160.00 1161.00
            *

1124        KK     D23BASIN
1125        KM        BASIN BOUNDARY FROM SIERRA VERDE
1126        BA   0.541
1127        LG    0.27    0.27    5.00    0.32      26
1128        UI       0      59     138     272     346     448     673     629     483     371
1129        UI     284     172     101      76      56      17      18      18      18       0
1130        UI       0       0       0       0       0       0       0       0       0       0
1131        UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 29

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

1132        UI       0       0       0       0       0       0       0       0       0       0
            *

1133        KK  DD23REDIVERT
1134        KM        Final Drainage Report for Sierra Verde Parcel 5, Infrastructure Drainage
1135        KM        Sierra Verde (temporary basins removed), Final Drainage Report for Sierr
1136        KM        Final Drainage Report for Harmony Apartments, Drainage Report for Royal
1137        KM        Final Drainage Report for Sierra Verde Parcel 9, Final Drainage Report f
1138        KM        Parcel 3, Final Drainage Report for Sierra Verde Parcel 2, Final Drainag
1139        KM        Sierra Verde Parcel 1, Drainage Report for Fry's at Waddell and Litchfie
1140        DT    RD23    36.3     0.0
1141        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1142        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1143        KK   DD131RETRIEVE
1144        DR  DD131S
            *

1145        KK  D13D23ROUTE
1146        KM        Cross-section: Cross-section determined from aerial 1/2 street section
1147        KM        Manning's N Value: street, earth with sparse trees and shrubs
1148        RS       3    FLOW
1149        RC   0.032   0.013   0.032    5460  0.0044    0.00
1150        RX  100.00  100.00  109.00  109.00  148.00  148.00  197.00  198.00
1151        RY  1180.0 1176.30 1176.30 1175.80 1175.00 1175.50 1177.00 1177.10
            *

1152        KK   CPD23COMBINE
1153        HC       3   5.642
            *

1154        KK   DD231DIVERT
1155        KM        Waddell at Litchfield split flow
1156        DT  DD231S     0.0     0.0
1157        DI     0.0   518.8   867.4  1680.6  2985.0     0.0     0.0     0.0     0.0     0.0
1158        DQ     0.0    51.3   223.3   727.6  1503.5     0.0     0.0     0.0     0.0     0.0
            *

1159        KK   DD232DIVERT
1160        KM        Waddell at Litchfield split flow
1161        DT  DD232S     0.0     0.0
1162        DI     0.0   467.5   644.1   953.0  1481.6     0.0     0.0     0.0     0.0     0.0
1163        DQ     0.0    55.8   138.4   242.9   365.2     0.0     0.0     0.0     0.0     0.0
            *
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1164        KK  D23D24ROUTE
1165        KM        Cross-section: Cross-section determined from Waddell
1166        KM        Road Drainage Improvement CAR Final by HDR
1167        KM        dated April 10, 2009, R137
1168        RS       3    FLOW
1169        RC   0.035   0.035   0.035    2646  0.0044    0.00
1170        RX  894.00  906.00  912.00  918.00  926.00  930.00  934.00  942.00
1171        RY  1157.0 1155.00 1154.00 1153.00 1153.00 1154.00 1155.00 1157.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1172        KK     D24BASIN
1173        KM        BASIN BOUNDARY FROM LITCHFIELD MANOR
1174        BA   0.492
1175        LG    0.27    0.25    5.10    0.31      28
1176        UI       0      56     145     267     346     467     677     539     421     315
1177        UI     227     116      89      56      26      17      17      17       0       0
1178        UI       0       0       0       0       0       0       0       0       0       0
1179        UI       0       0       0       0       0       0       0       0       0       0
1180        UI       0       0       0       0       0       0       0       0       0       0
            *

1181        KK  DD24REDIVERT
1182        KM        Final Drainage Report for Litchfield Manor (excess retention per report)
1183        DT    RD24    40.9     0.0
1184        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1185        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1186        KK   DD132RETRIEVE
1187        DR  DD132S
            *

1188        KK  D13D24ROUTE
1189        KM        Cross-section: Cross-section determined from aerial 1/2 street section
1190        KM        Manning's N Value: street, earth with sparse trees and shrubs
1191        RS       3    FLOW
1192        RC   0.032   0.013   0.013    5460  0.0044    0.00
1193        RX  100.00  100.10  145.00  145.10  175.00  175.10  184.90  185.00
1194        RY  1178.0 1176.50 1175.50 1175.00 1175.80 1176.30 1176.30 1180.00
            *

1195        KK   CPD24COMBINE
1196        HC       3   6.134
            *

1197        KK  D24D25ROUTE
1198        KM        Cross-section: Cross-section determined from Waddell
1199        KM        Road Drainage Improvement CAR Final by HDR
1200        KM        dated April 10, 2009, R138
1201        RS       2    FLOW
1202        RC   0.030   0.030   0.030    2701  0.0020    0.00
1203        RX  1000.0 1018.00 1019.00 1020.00 1026.00 1027.00 1028.00 1046.00
1204        RY  1100.0 1094.00 1094.00 1094.00 1094.00 1094.00 1094.00 1100.00
            *

1205        KK     D25BASIN
1206        KM        BASIN BOUNDARY FROM ROSEVIEW MULTI PHASE
1207        BA   0.497
1208        LG    0.25    0.25    4.80    0.35      30
1209        UI       0      63     200     335     439     678     685     499     371     247
1210        UI     120      87      53      19      20      19       0       0       0       0
1211        UI       0       0       0       0       0       0       0       0       0       0
1212        UI       0       0       0       0       0       0       0       0       0       0
1213        UI       0       0       0       0       0       0       0       0       0       0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1214        KK  DD25REDIVERT
1215        KM        Drainage Report for Roseview - Parcels 1-6, Master Drainage
1216        KM        Report for Roseview, Retention for Parcels 7 and 8 were estimated
1217        KM        based on aerial, Parcel 5a has no retention
1218        DT    RD25    37.1     0.0
1219        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1220        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1221        KK   CPD25COMBINE
1222        HC       2   6.631
            *

1223        KK  D25D39ROUTE
1224        KM        Cross-section: Cross-section determined from Waddell Road
1225        KM        Drainage Improvement CAR Final by HDR dated April 10, 2009, RLLE
1226        RS       1    FLOW
1227        RC   0.030   0.030   0.030    2020  0.0040    0.00
1228        RX    0.00   20.00   25.00   30.00   35.00   41.50   51.10   82.30
1229        RY   10.00    0.00    0.00    0.00    0.00    0.00    4.80   10.00
            *

1230        KK     D39BASIN
1231        KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
1232        BA   0.182
1233        LG    0.50    0.25    5.60    0.32       0
1234        UI       0      17      25      56      97     121     137     146     140     125
1235        UI     112      98      69      53      50      32      26      21      16      14
1236        UI      10      10       7       2       2       2       2       3       2       2
1237        UI       2       2       2       3       2       0       0       0       0       0
1238        UI       0       0       0       0       0       0       0       0       0       0
            *

1239        KK   CPD39COMBINE
1240        HC       2   6.813
            *

1241        KK  D39D42ROUTE
1242        KM        Cross-section: Cross-section determined from Waddell
1243        KM        Road Drainage Improvement CAR Final
1244        KM        by HDR dated April 10, 2009, RLLE1
1245        RS       3    FLOW
1246        RC   0.030   0.030   0.030    5691  0.0039    0.00
1247        RX    0.00   30.00   38.00   54.00   76.50  104.00  139.00  154.00
1248        RY   10.00    4.00    4.00    0.00    0.00    0.00    7.00   10.00
```

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                *
1249            KK     D42BASIN
1250            KM        BASIN BOUNDARY FROM PARQUE VERDE MULTI PHASE
1251            KM        DYSART SCHOOL DISTRICT, AND BUENA VISTA
1252            BA   0.994
1253            LG    0.24     0.24     5.20     0.29       32
1254            UI       0      150      594      890     1330     1722     1186      816      463      246
1255            UI     148       46       46       45        0        0        0        0        0        0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1256            UI       0        0        0        0        0        0        0        0        0        0
1257            UI       0        0        0        0        0        0        0        0        0        0
1258            UI       0        0        0        0        0        0        0        0        0        0
                *

1259            KK  DD42REDIVERT
1260            KM        Retention volume estimated based on aerial, Cactus and Dysart
1261            KM        Subdivision and Parque Verde - No Reports available
1262            DT    RD42     71.8      0.0
1263            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1264            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

1265            KK   CPD42COMBINE
1266            HC       3     9.87
                *

1267            KK   SRD42STORAGE
1268            KM        Storage behind Cactus Road
1269            KO
1270            RS       1     STOR
1271            SV             0.64     4.60    17.30    27.60    56.30
1272            SQ                    139.00   426.00   827.00  1295.00
1273            SE  1105.3 1108.00 1110.00 1112.00 1114.00 1116.00
1274            ST
                *

1275            KK  D42D53ROUTE
1276            KM        Cross-section: Cross-section determined from
1277            KM        Waddell Road Drainage Improvement CAR Final
1278            KM        by HDR dated April 10, 2009, RLE3
1279            RS       1     FLOW
1280            RC   0.030    0.030    0.030     1558   0.0020     0.00
1281            RX    0.00    10.00    22.00    97.00   171.00   172.00   184.00   194.00
1282            RY    3.50     3.00     0.00     0.00     0.00     0.00     3.00     3.50
                *

1283            KK     D53BASIN
1284            KM        BASIN BOUNDARY FROM EL MIRAGE MARKET PLACE, RANCHO MIRAGE UNIT 3
1285            BA   0.118
1286            LG    0.31     0.32     4.60     0.36       11
1287            UI       0       55      169      306      215      107       39       12        9        0
1288            UI       0        0        0        0        0        0        0        0        0        0
1289            UI       0        0        0        0        0        0        0        0        0        0
1290            UI       0        0        0        0        0        0        0        0        0        0
1291            UI       0        0        0        0        0        0        0        0        0        0
                *

1292            KK  DD53REDIVERT
1293            KM        Retention volume estimated based on aerial
1294            DT    RD53     12.1      0.0
1295            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1296            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1297            KK   CPD53COMBINE
1298            HC       2   9.988
                *

1299            KK   SRD53STORAGE
1300            KM        Waddell CAR West Cactus Basin
1301            KO
1302            RS       1     STOR
1303            SV             5.72    11.59    18.17    32.01    39.46    67.53    67.53    67.53    67.53
1304            SQ                                                                  546.00   731.00   890.00
1305            SE  1098.5 1099.50 1100.50 1101.50 1103.50 1104.50 1108.50 1111.00 1112.00 1113.00
1306            ST
                *

1307            KK  D53D54ROUTE
1308            KM        Cross-section: Cross-section determined from
1309            KM        Waddell Road Drainage Improvement CAR Final
1310            KM        by HDR dated April 10, 2009, RLE4
1311            RS       4     FLOW
1312            RC   0.030    0.030    0.030     3999   0.0038     0.00
1313            RX    0.00    36.00    39.00    42.00    45.00    48.00    51.00    87.00
1314            RY  1102.8 1096.80 1096.80 1096.80 1096.80 1096.80 1096.80 1102.80
                *

1315            KK     D43BASIN
1316            KM        BASIN BOUNDARY FROM MONTA BLANCA ESTATES, SUNNYVALE AND SUNDIAL
1317            BA   0.500
1318            LG    0.25     0.25     4.70     0.37       33
1319            UI       0       75      299      448      669      867      596      410      233      124
1320            UI      75       23       23       23        0        0        0        0        0        0
1321            UI       0        0        0        0        0        0        0        0        0        0
1322            UI       0        0        0        0        0        0        0        0        0        0
1323            UI       0        0        0        0        0        0        0        0        0        0
                *

1324            KK  DD43REDIVERT
1325            KM        Retention volume estimated based on aerial
1326            DT    RD43     35.5      0.0
1327            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1328            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

1329            KK  D43D54ROUTE
1330            KM        Cross-section: Golf course, assumed 0.5%
1331            KM        side slopes, V-ditch / Manning's N Value: grass - golf course
1332            RS      14     FLOW
1333            RC   0.025    0.025    0.025     3872   0.0023     0.00
1334            RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
```

```
1335        RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
            *
1                                   HEC-1 INPUT                                                    PAGE 34

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

1336        KK     D54BASIN
1337        KM        BASIN BOUNDARY FROM FAIRWAYS GOLF COURSE DIVISION
1338        KM        AND PUEBLO EL MIRAGE RV RESORT
1339        BA   0.271
1340        LG    0.20    0.27    4.45    0.49      14
1341        UI       0      65     226     345     557     406     260     119      64      25
1342        UI      15      15       0       0       0       0       0       0       0       0
1343        UI       0       0       0       0       0       0       0       0       0       0
1344        UI       0       0       0       0       0       0       0       0       0       0
1345        UI       0       0       0       0       0       0       0       0       0       0
            *

1346        KK  DD54REDIVERT
1347        KM        NO REPORTS - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
1348        KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
1349        DT    RD54     3.0     0.0
1350        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1351        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1352        KK   CPD54COMBINE
1353        HC       3  10.759
            *

1354        KK     D44BASIN
1355        KM        BASIN BOUNDARY FROM SUNDIAL MULTI PHASE, AGULAR HOMES, TERROVES,
1356        KM        EL MIRAGE HOUSING, ARIZONA BRISAS, MOUNTAIN TRAILE DEVELPMENTS AND
1357        KM        AGUA FRIA RIVER
1358        BA   0.535
1359        LG    0.26    0.27    3.78    0.45      23
1360        UI       0      70     230     379     496     793     718     520     385     234
1361        UI     120      84      43      21      22      22       0       0       0       0
1362        UI       0       0       0       0       0       0       0       0       0       0
1363        UI       0       0       0       0       0       0       0       0       0       0
1364        UI       0       0       0       0       0       0       0       0       0       0
            *

1365        KK  DD44REDIVERT
1366        KM        Retention volume estimated based on aerial
1367        DT    RD44    19.4     0.0
1368        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1369        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1370        KK     D55BASIN
1371        KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
1372        BA   0.187
1373        LG    0.28    0.28    3.48    0.55      24
1374        UI       0      45     158     242     387     279     175      80      44      17
1375        UI      10      11       0       0       0       0       0       0       0       0
1376        UI       0       0       0       0       0       0       0       0       0       0
1377        UI       0       0       0       0       0       0       0       0       0       0
1378        UI       0       0       0       0       0       0       0       0       0       0
            *
1                                   HEC-1 INPUT                                                    PAGE 35

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

1379        KK  DD55REDIVERT
1380        KM        Retention volume estimated based on aerial
1381        DT    RD55     9.8     0.0
1382        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1383        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1384        KK     D56BASIN
1385        KM        BASIN BOUNDARY FROM SUNDIAL UNIT 1 & 2 AND AGUA FRIA RIVER
1386        BA   0.225
1387        LG    0.20    0.26    4.40    0.50      24
1388        UI       0      35     144     214     333     385     259     176      88      51
1389        UI      27      10      11       0       0       0       0       0       0       0
1390        UI       0       0       0       0       0       0       0       0       0       0
1391        UI       0       0       0       0       0       0       0       0       0       0
1392        UI       0       0       0       0       0       0       0       0       0       0
            *

1393        KK  DD56REDIVERT
1394        KM        NO REPORT - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
1395        KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
1396        DT    RD56     3.1     0.0
1397        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1398        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1399        KK   DUMMYCOMBINE
1400        HC       4
            *

1401        KK   DUMMYCOMBINE
1402        HC       3
            *

1403        KK     D52BASIN
1404        KM        BASIN BOUNDARY FROM RACHO MIRAGE UNITS 1 AND
1405        KM        DYSART HIGH SCHOOL, AND DYSART RACHETTES
1406        BA   0.587
1407        LG    0.28    0.25    5.40    0.26      23
1408        UI       0      69     188     338     438     603     837     625     488     363
1409        UI     237     120      91      61      22      21      21      21       0       0
1410        UI       0       0       0       0       0       0       0       0       0       0
1411        UI       0       0       0       0       0       0       0       0       0       0
1412        UI       0       0       0       0       0       0       0       0       0       0
            *

1413        KK  DD52REDIVERT
1414        KM        Retention volume estimated based calculation assuming 100-yr 2hr retenti
1415        DT    RD52     4.6     0.0
1416        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1417        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *
1                                   HEC-1 INPUT                                                    PAGE 36
```

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

1418          KK  D52D66ROUTE
1419          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
1420          KM        based on aerial & topo / Manning's N Value: clean earth;
1421          KM        straight, street LOB
1422          RS       8    FLOW
1423          RC   0.013   0.022   0.038    5258  0.0015    0.00
1424          RX  100.00  120.00  141.00  153.00  163.00  175.00  595.00  600.00
1425          RY  1095.7 1098.20 1098.00 1095.00 1095.10 1098.00 1098.30 1098.65
              *

1426          KK     D66BASIN
1427          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
1428          BA   0.300
1429          LG   0.50    0.25    4.80    0.45       0
1430          UI      0      15      15      14      30      40      64      87      82      95
1431          UI    113     124     124     125     127     122     103     105     114      90
1432          UI     79      89      64      57      50      43      45      39      29      25
1433          UI     24      19      19      17      14      13      14       9       8       9
1434          UI      8       9       6       2       1       2       2       2       2       2
              *

1435          KK   CPD66COMBINE
1436          HC       2   0.887
              *

1437          KK  D66D67ROUTE
1438          KM        Cross-section: Cross-section estimated from aerial and topo-road
1439          KM        Manning's N Value: clean earth; straight, street ROB
1440          RS       1    FLOW
1441          RC   0.022   0.022   0.016    1882  0.0032    0.00
1442          RX  100.00  120.00  140.00  150.00  160.00  170.00  178.00  188.00
1443          RY  1092.5 1092.30 1092.00 1090.00 1090.10 1092.00 1092.30 1095.50
              *

1444          KK     D67BASIN
1445          KM        BASIN BOUNDARY FROM EL MIRAGE INDUSTRIAL PARK
1446          KM        COYOTE PASS RV STORAGE AND AGUA FRIA RIVER
1447          BA   0.317
1448          LG   0.30    0.27    4.60    0.45      28
1449          UI      0      28      48     114     150     181     224     317     341     254
1450          UI    213     170     133      89      52      45      29      21       9       9
1451          UI      9       8       9       0       0       0       0       0       0       0
1452          UI      0       0       0       0       0       0       0       0       0       0
1453          UI      0       0       0       0       0       0       0       0       0       0
              *

1454          KK   CPD67COMBINE
1455          HC       2   1.204
              *
1                                    HEC-1 INPUT                                          PAGE 37

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

1456          KK     D76BASIN
1457          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
1458          KM        1990 TOPO, LUKE INDUSTRIAL PARK, CLAYTON HOMES INC.
1459          BA   0.109
1460          LG   0.31    0.25    4.80    0.42      30
1461          UI      0       9      12      25      49      56      72      80      79      73
1462          UI     69      60      54      38      32      28      21      16      12      11
1463          UI      8       8       5       6       4       1       2       1       1       1
1464          UI      1       2       1       1       1       1       2       1       1       0
1465          UI      0       0       0       0       0       0       0       0       0       0
              *

1466          KK  D76D77ROUTE
1467          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width
1468          KM        based on aerial & topo / Manning's N Value: clean earth;
1469          KM        straight; street ROB
1470          RS       1    FLOW
1471          RC   0.022   0.022   0.016    2313  0.0130    0.00
1472          RX  100.00  120.00  140.00  146.00  148.00  154.00  164.00  174.00
1473          RY  1070.5 1070.30 1070.00 1068.00 1068.10 1070.00 1070.30 1070.50
              *

1474          KK     D77BASIN
1475          KM        BASIN BOUNDARY FROM UNION ROCK & MATERAIL CORR AND AGUA FRIA RIVER
1476          BA   0.361
1477          LG   0.15    0.25    4.60    0.45      54
1478          UI      0     152     597     769     600     328     158      88      49      12
1479          UI     12      12      11       0       0       0       0       0       0       0
1480          UI      0       0       0       0       0       0       0       0       0       0
1481          UI      0       0       0       0       0       0       0       0       0       0
1482          UI      0       0       0       0       0       0       0       0       0       0
              *

1483          KK   CPD77COMBINE
1484          HC       2    0.47
              *

1485          KK   DUMMYCOMBINE
1486          HC       3
              *

1487          KK     D35BASIN
1488          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
1489          BA   0.254
1490          LG   0.50    0.25    4.55    0.52       0
1491          UI      0      21      26      55     108     126     162     180     183     171
1492          UI    150     153     116     103      77      63      56      38      32      26
1493          UI     21      19      13      13      12       6       3       2       3       3
1494          UI      2       3       3       2       3       3       2       3       3       0
1495          UI      0       0       0       0       0       0       0       0       0       0
              *
1                                    HEC-1 INPUT                                          PAGE 38

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

1496          KK   DD231RETRIEVE
1497          DR  DD231S
              *

1498          KK  D23D35ROUTE
1499          KM        Cross-section: Ag field, assumed 0.5%
1500          KM        side slopes, V-ditch / Manning's N Value: Ag field
```

```
RS      27    FLOW
RC   0.038   0.038   0.038    2692  0.0037    0.00
RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
*

KK   CPD35COMBINE
HC       2   5.896
*

KK  DD35SEDIVERT
KM        Litchfield at 1/2 mi S. of Waddell split flow
DT   DD35S      0.0     0.0
DI     0.0    112.5   584.6  1947.2  4136.3     0.0     0.0     0.0     0.0     0.0
DQ     0.0     18.8    97.4   368.7   900.0     0.0     0.0     0.0     0.0     0.0
*

KK  D35D38ROUTE
KM        Cross-section: Cross-section from Surprise Pointe Master
KM        Drainage Report / Manning's N Value: riprap
RS       3    FLOW
RC   0.032   0.032   0.032    2588  0.0023    0.00
RX  100.00  105.00  110.00  125.50  131.50  151.00  155.00  160.00
RY  1000.0  999.90  999.80  996.10  996.00  999.80  999.90 1000.00
*

KK     D38BASIN
KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
BA   0.321
LG    0.50    0.25    5.10    0.40       0
UI       0      15      14      15      23      31      49      76      89      76
UI      98     111     121     121     123     123     121     109     101     106
UI     113      78      76      87      65      56      52      43      41      47
UI      31      27      23      24      18      19      17      13      13      13
UI      11       9       8       8       8       9       6       1       2       2
*

KK   DD232RETRIEVE
DR  DD232S
*

KK  D23D38ROUTE
KM        Cross-section: Cross-section determined from ATSF.OUT
KM        received from FCDMC on April 24, 2009-R137
RS      24    FLOW
RC   0.035   0.035   0.035    5273  0.0044    0.00
RX  894.00  906.00  912.00  918.00  926.00  930.00  934.00  942.00
```



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

RY  1157.0 1155.00 1154.00 1153.00 1153.00 1154.00 1155.00 1157.00
*

KK   CPD38COMBINE
HC       3   6.217
*

KK  D38D40ROUTE
KM        Cross-section: Cross-section determined from Waddell Road
KM        Drainage Improvement CAR Final by HDR dated April 10, 2009, RRR2
RS       3    FLOW
RC   0.035   0.035   0.035    2630  0.0015    0.00
RX    0.00   10.00   20.00   36.00   76.00   92.00  100.00  110.00
RY  1140.0 1140.00 1140.00 1136.00 1136.00 1140.00 1140.00 1140.00
*

KK     D32BASIN
KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
BA   0.248
LG    0.25    0.25    4.70    0.36      35
UI       0      59     207     316     510     371     238     108      59      24
UI      13      14       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DD32REDIVERT
KM        Preliminary Drainage Report for Marley Park Phase II Parcel 6
KM        Drainage Report for Marley Park Parcel 8 (almost 20ac-ft over
KM        required, according to report)
DT    RD32    33.4     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK  DD32SEDIVERT
KM        Cactus at 150th Ln split flow
DT   DD32S      0.0     0.0
DI     0.0     7.4    28.9    41.0   151.6   527.0  1011.0  2605.0     0.0     0.0
DQ     0.0     0.0     1.8     2.3    23.9   213.0   442.0  1123.0     0.0     0.0
*

KK  D32D33ROUTE
KM        Cross-section: Cross-section determined from aerial
KM        Manning's N Value: street, earth w/ grass
RS       1    FLOW
RC   0.032   0.013   0.013    2704  0.0055    0.00
RX  100.00  102.00  138.00  138.10  160.00  168.50  171.90  172.00
RY  999.70  999.60  999.00  998.50  998.90  999.10  999.20 1000.00
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     D31BASIN
KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
BA   0.497
LG    0.30    0.29    4.70    0.37      17
UI       0      72     275     417     596     863     606     430     279     126
UI      84      39      22      22       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DD31REDIVERT
KM        Preliminary Drainage Report for Marley Park Plaza, Drainage
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1585          KM        Report for Waddell Road at Marley Park, Final Drainage Report
1586          KM        Amended for Marley Park Heritage Club Site, Drainage Report for
1587          KM        Marley Park Parcel 11, Drainage Report for Marley Park Phase 2A Mass
1588          DT    RD31    50.0     0.0
1589          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1590          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1591          KK   DD211RETRIEVE
1592          DR  DD211S
              *

1593          KK  D21D31ROUTE
1594          KM        Cross-section: Cross-section determined from aerial
1595          KM        Manning's N Value: earth w/ grass (main channel),
1596          KM        earth with sparse trees and shrubs (left overbank)
1597          RS       2    FLOW
1598          RC   0.032  0.025   0.025    2676  0.0052    0.00
1599          RX  100.00  102.00  104.00  124.00  128.00  132.00  135.00  137.00
1600          RY  1170.0 1168.00 1167.00 1167.00 1168.00 1169.00 1169.50 1170.00
              *

1601          KK   CPD31COMBINE
1602          HC       2     2.5
              *

1603          KK  D31D33ROUTE
1604          KM        Cross-section: Cross-section determined from aerial
1605          KM        Manning's N Value: earth w/ grass
1606          RS       2    FLOW
1607          RC   0.025   0.025   0.025    2627  0.0042    0.00
1608          RX  100.00  100.50  105.00  113.00  116.00  125.00  129.00  130.00
1609          RY  1003.0  999.90  999.80  997.80  997.70  999.80 1000.00 1000.80
              *

1610          KK     D33BASIN
1611          KM        BASIN BOUNDARY FROM RANCHO GABRIELA PHASE 1
1612          BA   0.250
1613          LG    0.25    0.25    4.80    0.35      35
1614          UI       0      71     242     384     542     349     195      81      38      15
1615          UI      15       0       0       0       0       0       0       0       0       0
```



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

1616          UI       0       0       0       0       0       0       0       0       0       0
1617          UI       0       0       0       0       0       0       0       0       0       0
1618          UI       0       0       0       0       0       0       0       0       0       0
              *

1619          KK  DD33REDIVERT
1620          KM        Retention volume estimated based on aerial, Ranch Gabriella Phase I
1621          DT    RD33    18.7     0.0
1622          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1623          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1624          KK   CPD33COMBINE
1625          HC       3   2.998
              *

1626          KK   DD331DIVERT
1627          KM        Cactus at Bullard split flow
1628          DT  DD331S     0.0     0.0
1629          DI     0.0   136.2   690.5  2301.8  4749.1     0.0     0.0     0.0     0.0     0.0
1630          DQ     0.0    73.3   386.4  1268.6  2600.8     0.0     0.0     0.0     0.0     0.0
              *

1631          KK   DD332DIVERT
1632          KM        Cactus at Bullard split flow
1633          DT  DD332S     0.0     0.0
1634          DI     0.0    62.9   304.2  1033.1  2148.3     0.0     0.0     0.0     0.0     0.0
1635          DQ     0.0    31.8    90.0   165.3   254.6     0.0     0.0     0.0     0.0     0.0
              *

1636          KK  D33D34ROUTE
1637          KM        Cross-section: Cross-section determined from aerial
1638          KM        Manning's N Value: earth w/ grass
1639          RS       5    FLOW
1640          RC   0.025   0.025   0.025    5348  0.0030    0.00
1641          RX  100.00  105.00  123.00  127.00  133.00  139.00  141.00  152.00
1642          RY  1142.0 1141.00 1141.00 1140.00 1139.00 1140.00 1141.00 1141.50
              *

1643          KK     D34BASIN
1644          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
1645          BA   0.500
1646          LG    0.50    0.25    4.65    0.48       0
1647          UI       0      28      29      37      60     111     157     160     187     224
1648          UI     237     241     242     235     201     203     217     148     159     141
1649          UI     111      94      82      89      60      51      46      38      35      31
1650          UI      26      26      20      16      17      16      16       7       3       4
1651          UI       3       4       3       4       4       3       4       3       4       3
              *
```



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

1652          KK  DD34REDIVERT
1653          KM        Final Drainage Report for Marley Park Waddell Road, Phase 2
1654          KM        (Empty Lot except for retention for Waddell Rd-Future Marley Park)
1655          DT    RD34     2.4     0.0
1656          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1657          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1658          KK   DD212RETRIEVE
1659          DR  DD212S
              *

1660          KK  D21D34ROUTE
1661          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1662          KM        Manning's N Value: Ag field
1663          RS      11    FLOW
1664          RC   0.038   0.038   0.038    3892  0.0057    0.00
1665          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1666          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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1667          KK   CPD34COMBINE
1668          HC       3   3.498
              *

1669          KK  D34D36ROUTE
1670          KM        Cross-section: Cross-section taken from Infrastructure Drainage Report f
1671          KM        Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees and br
1672          RS       4    FLOW
1673          RC   0.032   0.032   0.032    5236  0.0034    0.00
1674          RX  100.00  100.10  102.00  110.00  116.00  124.00  130.00  140.00
1675          RY  1000.0  998.00  997.90  996.50  996.40  998.00  999.00 1000.00
              *

1676          KK     D36BASIN
1677          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
1678          BA   0.247
1679          LG    0.32    0.25    4.80    0.38      25
1680          UI       0      32     107     174     230     366     331     240     178     108
1681          UI      55      39      20      10      10      10       0       0       0       0
1682          UI       0       0       0       0       0       0       0       0       0       0
1683          UI       0       0       0       0       0       0       0       0       0       0
1684          UI       0       0       0       0       0       0       0       0       0       0
              *

1685          KK  DD36REDIVERT
1686          KM        Drainage Report for Veramonte Infrastructure
1687          KM        Prepared by DEA Jan 2004
1688          DT    RD36     11.1     0.0
1689          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1690          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1691          KK  DD35SERETRIEVE
1692          DR   DD35S
              *

1693          KK  D35D36ROUTE
1694          KM        Cross-section: Cross-section taken from Infrastructure Drainage Report f
1695          KM        Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees and br
1696          RS       3    FLOW
1697          RC   0.032   0.032   0.032    2638  0.0038    0.00
1698          RX  100.00  103.00  108.00  126.00  130.00  142.00  143.00  144.00
1699          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
              *

1700          KK   CPD36COMBINE
1701          HC       3   7.638
              *

1702          KK   DD361DIVERT
1703          KM        Cactus at Litchfield split flow
1704          DT  DD361S     0.0     0.0
1705          DI     0.0     0.0    70.2   838.2  2790.2     0.0     0.0     0.0     0.0     0.0
1706          DQ     0.0     0.0    64.8   768.5  2105.4     0.0     0.0     0.0     0.0     0.0
              *

1707          KK   DD362DIVERT
1708          KM        Cactus at Litchfield split flow
1709          DT  DD362S     0.0     0.0
1710          DI     0.0     0.0     5.4    69.7   684.8     0.0     0.0     0.0     0.0     0.0
1711          DQ     0.0     0.0     5.4    35.1    78.9     0.0     0.0     0.0     0.0     0.0
              *

1712          KK  D36D40ROUTE
1713          KM        Cross-section: Cross-section determined from ATSF.OUT
1714          KM        received from FCDMC on April 24, 2009-R151
1715          RS      20    FLOW
1716          RC   0.080   0.035   0.035    2600  0.0027    0.00
1717          RX  1000.0 1090.00 1710.00 2160.00 2240.00 2268.00 2269.00 2270.00
1718          RY  1141.0 1140.00 1138.00 1136.00 1136.00 1137.00 1137.00 1137.00
              *

1719          KK     D40BASIN
1720          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
1721          BA   0.242
1722          LG    0.50    0.25    5.40    0.34       0
1723          UI       0      21      26      54     111     123     160     178     177     160
1724          UI     154     133     118      87      71      62      46      35      28      24
1725          UI      19      16      12      12      11       2       3       2       3       2
1726          UI       3       3       2       3       2       3       3       2       3       0
1727          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1728          KK   CPD40COMBINE
1729          HC       3   8.201
              *

1730          KK  D4049AROUTE
1731          KM        Cross-section: Cross-section determined from ATSF.OUT
1732          KM        received from FCDMC on April 24, 2009-RRR3
1733          RS       1    FLOW
1734          RC   0.013   0.013   0.130    1983  0.0013    0.00
1735          RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
1736          RY  1130.0 1130.00 1130.00 1126.00 1126.00 1130.00 1130.00 1130.00
              *

1737          KK  D4049BROUTE
1738          KM        Cross-section: Cross-section determined from ATSF.OUT
1739          KM        received from FCDMC on April 24, 2009-RRR3
1740          RS       1    FLOW
1741          RC   0.013   0.013   0.013    3185  0.0033    0.00
1742          RX    0.00   10.00   20.00   20.10   34.90   35.00   40.00   50.00
1743          RY  1130.0 1130.00 1130.00 1126.00 1126.00 1130.00 1130.00 1130.00
              *

1744          KK     D47BASIN
1745          KM        BASIN BOUNDARY FROM RANCHO GABRIELA MULTI PHASE
1746          BA   0.997
1747          LG    0.36    0.25    4.65    0.43      19
1748          UI       0      52      53      59     176     220     256     287     324     361
1749          UI     407     497     628     658     553     474     424     383     330     291
1750          UI     259     218     159     107      91      86      76      52      52      39
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1751          UI      16      16      17      16      16      16      16      16      17       0
1752          UI       0       0       0       0       0       0       0       0       0       0
              *

1753          KK  DD47REDIVERT
1754          KM        Drainage Report for Imagine Charter Schools, Retention
1755          KM        Calculations for Rancho Gabrialla Elementary School No 13,
1756          KM        Remaining retention volume estimated based on aerial
1757          DT    RD47    71.2     0.0
1758          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1759          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1760          KK  DD32SERETRIEVE
1761          DR   DD32S
              *

1762          KK  D3247AROUTE
1763          KM        Cross-section: Based on aerial, retention basin / Manning's N Value:
1764          KM        earth with grass and forbs, earth with sparse trees and shrubs
1765          RS       1    FLOW
1766          RC   0.025   0.025   0.032    6247  0.0026    0.00
1767          RX  100.00  102.00  105.00  120.00  180.00  184.00  210.00  215.00
1768          RY  1000.0  999.80  999.50  996.50  996.40  996.80  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1769          KK  D3247BROUTE
1770          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1771          KM        Manning's N Value: Ag field
1772          RS       1    FLOW
1773          RC   0.038   0.038   0.038    3975  0.0025    0.00
1774          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1775          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

1776          KK   DD331RETRIEVE
1777          DR  DD331S
              *

1778          KK  D3347AROUTE
1779          KM        Cross-section determined from aerial, assumed 1' deep
1780          KM        Manning's N Value: earth with grass, earth with sparse trees and shrubs
1781          RS       5    FLOW
1782          RC   0.032   0.025   0.032    2661  0.0023    0.00
1783          RX  100.00  120.00  139.00  143.00  158.00  162.00  199.00  200.00
1784          RY  1000.0  999.60  999.50  998.50  998.40  999.50  999.60 1000.00
              *

1785          KK  D3347BROUTE
1786          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1787          KM        Manning's N Value: Ag field
1788          RS       7    FLOW
1789          RC   0.038   0.038   0.038    2661  0.0023    0.00
1790          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1791          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

1792          KK   CPD47COMBINE
1793          HC       3   3.995
              *

1794          KK  DD47SEDIVERT
1795          KM        Peoria at Bullard split flow
1796          DT   DD47S     0.0     0.0
1797          DI     0.0   692.3  2751.1  6693.8 12151.5     0.0     0.0     0.0     0.0     0.0
1798          DQ     0.0   609.8  2322.4  5410.8  9603.6     0.0     0.0     0.0     0.0     0.0
              *

1799          KK  D47D48ROUTE
1800          KM        Cross-section: Cross-section determined from aerial
1801          KM        Manning's N Value: earth w/ sparse trees and brush
1802          RS      15    FLOW
1803          RC   0.032   0.032   0.032    5328  0.0036    0.00
1804          RX  100.00  100.10  100.20  110.00  144.00  154.00  155.00  156.00
1805          RY  1000.2 1000.10 1000.00  997.00  996.90 1000.00 1000.10 1000.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1806          KK     D48BASIN
1807          KM        BASIN BOUNDARY FROM MOUNTAIN GATE MULIT PHASE, AG LAND AND 1990 TOPO
1808          BA   0.998
1809          LG    0.33    0.25    4.80    0.35      14
1810          UI       0      62      63     135     238     299     347     387     461     533
1811          UI     703     799     630     543     482     405     351     304     240     159
1812          UI     112     102      87      63      62      24      19      19      19      19
1813          UI      19      19      20       0       0       0       0       0       0       0
1814          UI       0       0       0       0       0       0       0       0       0       0
              *

1815          KK  DD48REDIVERT
1816          KM        Master Drainage Report for Mountain Gate,
1817          KM        Final Drainage Report for Kenly Farms Unit 1
1818          DT    RD48    54.2     0.0
1819          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1820          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1821          KK   DD332RETRIEVE
1822          DR  DD332S
              *

1823          KK  D33D48ROUTE
1824          KM        Cross-section: Cross-section determined from aerial
1825          KM        Manning's N Value: earth w/ sparse trees and shrubs
1826          RS      16    FLOW
1827          RC   0.032   0.032   0.032    9601  0.0031    0.00
1828          RX  100.00  101.00  102.00  114.00  138.00  150.00  151.00  152.00
1829          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *

1830          KK   DD361RETRIEVE
1831          DR  DD361S
              *
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1832          KK  D3648AROUTE
1833          KM        Cross-section: Cross-section determined from aerial
1834          KM        Manning's N Value: clean earth (center), street (lt), and Ag field (rt)
1835          RS      12    FLOW
1836          RC   0.013   0.022   0.038    3335  0.0030    0.00
1837          RX  100.00  106.00  112.00  125.00  126.00  135.00  200.00  290.00
1838          RY  1000.0  999.90  999.70  999.00  998.90  999.10 1000.00 1001.00
              *

1839          KK  D3648BROUTE
1840          KM        Cross-section: Cross-section determined from aerial
1841          KM        Manning's N Value: clean earth; straight
1842          RS       1    FLOW
1843          RC   0.022   0.022   0.022    1965  0.0031    0.00
1844          RX  100.00  100.50  110.00  120.00  140.00  150.00  160.00  161.00
1845          RY  1003.0 1000.00  999.50  997.50  997.40  999.50  999.90 1000.00
              *
1                                        HEC-1 INPUT                                          PAGE 47

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

1846          KK   CPD48COMBINE
1847          HC       4   9.633
              *

1848          KK   DD481DIVERT
1849          KM        Peoria at Litchfield split flow
1850          DT  DD481S      0.0     0.0
1851          DI     0.0   624.6  2594.8  5787.1 10151.4     0.0     0.0     0.0     0.0     0.0
1852          DQ     0.0   532.1  1825.7  3708.3  6197.9     0.0     0.0     0.0     0.0     0.0
              *

1853          KK   DD482DIVERT
1854          KM        Peoria at Litchfield split flow
1855          DT  DD482S      0.0     0.0
1856          DI     0.0    92.5   769.1  2078.8  3953.5     0.0     0.0     0.0     0.0     0.0
1857          DQ     0.0    22.8    76.8   149.1   235.7     0.0     0.0     0.0     0.0     0.0
              *

1858          KK  D48D49ROUTE
1859          KM        Cross-section: Cross-section determined from aerial
1860          KM        Manning's N Value: clean earth: straight and half street
1861          RS       2    FLOW
1862          RC   0.022   0.022   0.013    2623  0.0034    0.00
1863          RX  100.00  101.00  102.00  115.00  125.00  143.00  150.00  156.00
1864          RY  1000.2 1000.10 1000.00  998.00  998.10 1000.00 1000.40 1000.60
              *

1865          KK     D49BASIN
1866          KM        BASIN BOUNDARY FROM CITY OF SURPRISE WWTP
1867          BA   0.489
1868          LG    0.12    0.25    4.90    0.40      37
1869          UI       0     130     448     699    1052     700     415     175      94      29
1870          UI      28       0       0       0       0       0       0       0       0       0
1871          UI       0       0       0       0       0       0       0       0       0       0
1872          UI       0       0       0       0       0       0       0       0       0       0
1873          UI       0       0       0       0       0       0       0       0       0       0
              *

1874          KK  DD49REDIVERT
1875          KM        City of Surprise Special Planning Area 1 16.3 MGD
1876          KM        Water Reclamation Facility (PROVIDED VOLUME
1877          KM        NOT IN PLANS, USED REQUIRED VOLUME)
1878          DT    RD49     7.4     0.0
1879          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1880          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1881          KK   DD362RETRIEVE
1882          DR  DD362S
              *
1                                        HEC-1 INPUT                                          PAGE 48

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

1883          KK  D36D49ROUTE
1884          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1885          KM        Manning's N Value: Ag field
1886          RS      37    FLOW
1887          RC   0.038   0.038   0.038    6555  0.0038    0.00
1888          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1889          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

1890          KK   CPD49COMBINE
1891          HC       4  10.685
              *

1892          KK  D49D63ROUTE
1893          KM        Cross-section: Cross-section determined from ATSF.OUT
1894          KM        received from FCDMC on April 24, 2009-RRRW
1895          RS       2    FLOW
1896          RC   0.035   0.035   0.035    2712  0.0015    0.00
1897          RX    0.00   10.00   20.00   36.00   86.00  102.00  110.00  120.00
1898          RY  1114.0 1114.00 1114.00 1110.00 1110.00 1114.00 1114.00 1114.00
              *

1899          KK     D60BASIN
1900          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
1901          KM        1990 TOPO, AND RR ALIGNMENT
1902          BA   0.404
1903          LG    0.47    0.25    4.55    0.51       3
1904          UI       0      26      27      43      71     128     153     165     205     220
1905          UI     218     221     197     182     204     138     149     117     100      77
1906          UI      78      64      47      42      34      32      25      23      21      15
1907          UI      15      15      14       4       3       3       3       4       3       3
1908          UI       4       3       3       3       4       3       3       4       3       3
              *

1909          KK   DD481RETRIEVE
1910          DR  DD481S
              *

1911          KK  D48D60ROUTE
1912          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based
1913          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush (main
1914          KM        channel), 1/2 street (left bank), Ag field (right bank)
```

```
1915          RS       3    FLOW
1916          RC   0.013   0.032   0.038    2425  0.0037    0.00
1917          RX  100.00  110.00  112.00  122.00  132.00  144.00  244.00  344.00
1918          RY  1120.4 1120.20 1120.00 1118.00 1118.10 1120.00 1120.10 1120.40
              *

1919          KK   CPD60COMBINE
1920          HC       2  10.037
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1921          KK  D60D63ROUTE
1922          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
1923          KM        aerial & topo / Manning's N Value: clean earth, straight; Ag field
1924          RS       1    FLOW
1925          RC   0.038   0.022   0.022    1984  0.0020    0.00
1926          RX  100.00  120.00  140.00  152.00  156.00  168.00  182.00  188.00
1927          RY  1111.3 1111.10 1111.00 1108.00 1107.90 1111.00 1111.20 1111.30
              *

1928          KK     D63BASIN
1929          KM        BASIN BOUNDARY FROM 1990 TOPO, AG LAND, AND SMALL AREA OF 2008 TOPO.
1930          KM        AERIAL CONFIRMS AREA OF OVERTOPPING ON RR TRACKS, EVIDENCE OF TRACK
1931          KM        REPLACEMENT
1932          BA   0.222
1933          LG    0.50    0.25    4.35    0.59       0
1934          UI       0      20      29      62     117     137     161     173     173     144
1935          UI     146     113      94      71      61      44      34      26      22      18
1936          UI      14      12      12       4       3       2       3       2       3       2
1937          UI       3       3       2       3       2       3       0       0       0       0
1938          UI       0       0       0       0       0       0       0       0       0       0
              *

1939          KK   DD482RETRIEVE
1940          DR  DD482S
              *

1941          KK  D48D63ROUTE
1942          KM        Cross-section: cross-section estimated from aerial, estimated 1' depth
1943          KM        Manning's N Value: clean earth, straight
1944          RS      38    FLOW
1945          RC   0.038   0.038   0.038    5267  0.0015    0.00
1946          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1947          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

1948          KK   CPD63COMBINE
1949          HC       4  11.311
              *

1950          KK   SRD63STORAGE
1951          KM        Storage behind AT&SF Railroad tracks
1952          KO
1953          RS       1    STOR
1954          SV            4.55   22.10   52.90  108.20  174.60  245.00  336.00  397.00
1955          SQ           35.00   60.00  335.00  715.00  915.00 1065.00 1225.00 1385.00
1956          SE  1095.0 1098.00 1100.00 1102.00 1104.00 1106.00 1108.00 1110.00 1112.00
1957          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1958          KK  D63D64ROUTE
1959          KM        Cross-section: Cross-section determined from ATSF.OUT
1960          KM        received from FCDMC on April 24, 2009-RRR5
1961          RS       3    FLOW
1962          RC   0.035   0.035   0.035    3291  0.0015    0.00
1963          RX    0.00   10.00   20.00   36.00   86.00  102.00  110.00  120.00
1964          RY  1114.0 1114.00 1114.00 1110.00 1110.00 1114.00 1114.00 1114.00
              *

1965          KK     D62BASIN
1966          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
1967          KM        1990 TOPO, AND BNSF RR ALIGNMENT
1968          BA   0.250
1969          LG    0.48    0.25    4.40    0.56       1
1970          UI       0      22      26      55     113     125     164     179     183     167
1971          UI     155     142     119      94      74      63      50      37      30      25
1972          UI      20      18      12      12      12       3       3       2       3       3
1973          UI       2       3       3       2       3       3       3       2       3       0
1974          UI       0       0       0       0       0       0       0       0       0       0
              *

1975          KK   DD621DIVERT
1976          KM        Olive at Litchfield Rd split flow
1977          DT  DD621S     0.0     0.0
1978          DI     0.0    67.0   812.8  2353.7  4689.4     0.0     0.0     0.0     0.0     0.0
1979          DQ     0.0    50.7   512.2  1401.2  2724.4     0.0     0.0     0.0     0.0     0.0
              *

1980          KK   DD622DIVERT
1981          KM        Olive at Litchfield Rd split flow
1982          DT  DD622S     0.0     0.0
1983          DI     0.0    16.3   300.6   952.6  1965.1     0.0     0.0     0.0     0.0     0.0
1984          DQ     0.0     8.1    52.7   118.3   199.5     0.0     0.0     0.0     0.0     0.0
              *

1985          KK  D62D64ROUTE
1986          KM        Cross-section: Estimated 3' deep and 5:1 side slopes, width based on aer
1987          KM        & topo / Manning's N Value: clean earth channel; street ROW
1988          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
1989          KM        aerial & topo / Manning's N Value: clean earth; straight, left LOB
1990          RS       7    FLOW
1991          RC   0.022   0.022   0.013    5287  0.0019    0.00
1992          RX  100.00  120.00  140.00  156.00  160.00  176.00  183.00  210.00
1993          RY  1099.2 1099.10 1099.00 1096.00 1095.90 1099.00 1099.10 1099.20
              *

1994          KK     D64BASIN
1995          KM        Boundary based on AT&SF CAR
1996          BA   0.274
1997          LG    0.46    0.25    4.40    0.56       4
1998          UI       0      22      26      55     105     130     165     185     192     187
1999          UI     158     173     119     121      88      70      68      45      36      30
2000          UI      26      20      19      13      12      13       4       2       3       3
```

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2001          UI       3       3       3       3       2       3       3       3       3       3
1                                          HEC-1 INPUT                                                PAGE 51

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

2002          UI       3       0       0       0       0       0       0       0       0       0
              *

2003          KK   CPD64COMBINE
2004          HC       3  11.835
              *

2005          KK  D64D74ROUTE
2006          KM        Cross-section: Cross-section determined from ATSF.OUT
2007          KM        received from FCDMC on April 24, 2009-RRR6
2008          RS       4    FLOW
2009          RC   0.035   0.035   0.035    4677  0.0015    0.00
2010          RX    0.00   10.00   20.00   36.00   86.00  102.00  110.00  120.00
2011          RY  1114.0 1114.00 1114.00 1110.00 1110.00 1114.00 1114.00 1114.00
              *

2012          KK    D73ABASIN
2013          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2014          BA   0.243
2015          LG    0.40    0.25    4.55    0.44       2
2016          UI       0      26      40      99     145     195     213     213     181     176
2017          UI     142     101      77      67      44      34      28      23      16      14
2018          UI      11       3       3       4       3       3       3       3       4       3
2019          UI       3       3       0       0       0       0       0       0       0       0
2020          UI       0       0       0       0       0       0       0       0       0       0
              *

2021          KK   DD621RETRIEVE
2022          DR  DD621S
              *

2023          KK  D6273AROUTE
2024          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
2025          KM        aerial & topo / Manning's N Value: clean earth; straight
2026          RS       4    FLOW
2027          RC   0.022   0.022   0.022    6486  0.0045    0.00
2028          RX  100.00  111.00  122.00  134.00  138.00  150.00  160.00  170.00
2029          RY  1094.2 1094.10 1094.00 1091.00 1091.10 1094.00 1094.10 1094.20
              *

2030          KK  CPD73ACOMBINE
2031          HC       2   0.493
              *

2032          KK  D73A74ROUTE
2033          KM        Cross-section: Cross-section determined from ATSF.OUT
2034          KM        received from FCDMC on April 24, 2009-RRR6
2035          RS       2    FLOW
2036          RC   0.025   0.025   0.025    3524  0.0030    0.00
2037          RX  1500.0 1501.00 1588.00 1600.00 1612.00 1630.00 1699.00 1700.00
2038          RY  1102.0 1101.00 1101.00 1098.00 1098.00 1101.00 1101.00 1102.00
              *
1                                          HEC-1 INPUT                                                PAGE 52

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

2039          KK     D74BASIN
2040          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
2041          BA   0.314
2042          LG    0.50    0.25    4.50    0.54       0
2043          UI       0      17      18      21      36      60      90     102     109     128
2044          UI     145     146     146     144     132     120     129     113      92     102
2045          UI      71      66      53      49      54      32      31      28      22      22
2046          UI      18      15      16      12      10      10      10      10       5       2
2047          UI       3       2       2       2       2       3       2       2       2       2
              *

2048          KK   DD622RETRIEVE
2049          DR  DD622S
              *

2050          KK  D62D74ROUTE
2051          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2052          KM        Manning's N Value: avg value for cultivated areas from ""Est
2053          KM        Mng's Roughness Coefficient for Strm Chnls and Flood Plains in MC""
2054          RS      37    FLOW
2055          RC   0.038   0.038   0.038    7477  0.0035    0.00
2056          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2057          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

2058          KK   CPD74COMBINE
2059          HC       4  12.392
              *

2060          KK   SRD74STORAGE
2061          KM        PONDING BEHIND NEW BASIN AT NORTHERN PARKWAY, SRRR7 PER ATSF.OUT
2062          KO
2063          RS       1    STOR
2064          SV            0.50    4.20   12.70   23.70   36.00   49.00   62.00   75.00   89.00
2065          SQ            5.00   20.00   35.00   50.00  152.00  325.00  500.00  550.00  620.00
2066          SE  1073.0 1074.00 1075.00 1076.00 1077.00 1078.00 1079.00 1080.00 1081.00 1082.00
2067          ST
              *

2068          KK    D78ABASIN
2069          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2070          BA   0.184
2071          LG    0.50    0.25    4.60    0.50       0
2072          UI       0       9       9      10      19      26      43      56      49      63
2073          UI      72      79      78      78      79      73      64      70      69      49
2074          UI      51      51      37      35      28      26      30      18      17      15
2075          UI      13      12      11       9       8       9       6       6       5       5
2076          UI       5       4       2       1       1       1       1       1       2       1
              *
1                                          HEC-1 INPUT                                                PAGE 53

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

2077          KK  CPD78ACOMBINE
2078          HC       2  12.576
              *
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2079          KK  D78ACPROUTE
2080          KM        Cross-section: Cross-section determined from ATSF.OUT
2081          KM        received from FCDMC on April 24, 2009-RRR7
2082          RS       1    FLOW
2083          RC   0.013   0.013   0.013    1641  0.0013    0.00
2084          RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
2085          RY  1080.0 1080.00 1080.00 1076.00 1076.00 1080.00 1080.00 1080.00
              *

2086          KK     D41BASIN
2087          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2088          BA   0.253
2089          LG    0.49    0.15    7.30    0.16       1
2090          UI       0      28      47     123     171     225     235     220     205     163
2091          UI     136      97      80      50      41      31      25      18      16      10
2092          UI       4       3       4       3       4       3       4       3       4       3
2093          UI       0       0       0       0       0       0       0       0       0       0
2094          UI       0       0       0       0       0       0       0       0       0       0
              *

2095          KK  D41D50ROUTE
2096          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2097          KM        Manning's N Value: Ag field
2098          RS      14    FLOW
2099          RC   0.038   0.038   0.038    6744  0.0030    0.00
2100          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2101          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

2102          KK     D50BASIN
2103          KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
2104          BA   0.505
2105          LG    0.48    0.15    7.00    0.18       3
2106          UI       0      23      24      23      41      54      89     122     145     130
2107          UI     180     174     197     199     198     198     190     167     164     177
2108          UI     157     122     134     120      92      90      70      66      73      55
2109          UI      45      38      38      30      29      27      22      21      22      16
2110          UI      13      14      13      13      14       5       3       3       3       3
              *

2111          KK   CPD50COMBINE
2112          HC       2   0.758
              *

2113          KK  D5064AROUTE
2114          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2115          KM        Manning's N Value: Ag field
2116          RS       9    FLOW
2117          RC   0.038   0.038   0.038    5294  0.0032    0.00
2118          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
```



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

2119          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

2120          KK    D64ABASIN
2121          KM        Boundary based on AT&SF CAR
2122          BA   0.497
2123          LG    0.50    0.25    4.80    0.45       0
2124          UI       0      26      27      29      55      83     132     158     151     207
2125          UI     199     223     220     223     217     185     187     207     143     143
2126          UI     146     105      98      79      75      79      50      45      43      34
2127          UI      33      28      24      25      21      15      15      15      15      13
2128          UI       3       3       4       3       3       3       4       3       3       4
              *

2129          KK  CPD64ACOMBINE
2130          HC       2   1.255
              *

2131          KK  64A74AROUTE
2132          KM        Cross-section: Estimated 3' deep, 4:1 side slopes, width based
2133          KM        on aerial & topo / Manning's N Value: clean earth; straight, LOB
2134          RS       4    FLOW
2135          RC   0.016   0.022   0.022    5291  0.0025    0.00
2136          RX  100.00  120.00  140.00  152.00  158.00  170.00  175.00  180.00
2137          RY  1090.5 1090.25 1090.00 1087.00 1087.10 1090.00 1090.25 1090.50
              *

2138          KK    D74ABASIN
2139          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2140          BA   0.492
2141          LG    0.40    0.25    4.65    0.48      14
2142          UI       0      32      32      53      88     156     186     201     253     266
2143          UI     267     270     239     222     252     166     180     143     120      94
2144          UI      95      76      57      52      40      40      30      29      25      18
2145          UI      18      18      17       4       3       4       4       4       4       4
2146          UI       4       4       4       4       4       4       4       4       4       4
              *

2147          KK  CPD74ACOMBINE
2148          HC       2   1.747
              *

2149          KK  D74A78ROUTE
2150          KM        Cross-section: Cross-section determined from ATSF.OUT
2151          KM        received from FCDMC on April 24, 2009-R197
2152          RS       1    FLOW
2153          RC   0.025   0.025   0.025    1159  0.0030    0.00
2154          RX  1500.0 1501.00 1588.00 1600.00 1624.00 1642.00 1697.00 1700.00
2155          RY  1096.0 1095.00 1094.00 1091.00 1091.00 1094.00 1095.00 1096.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2156          KK  CP7874COMBINE
2157          HC       2  14.323
              *

2158          KK  78A78BROUTE
2159          KM        Cross-section: Cross-section determined from ATSF.OUT
2160          KM        received from FCDMC on April 24, 2009-RRR8
2161          RS       2    FLOW
2162          RC   0.013   0.013   0.013    5190  0.0013    0.00
2163          RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
2164          RY  1080.0 1080.00 1080.00 1076.00 1076.00 1080.00 1080.00 1080.00
```

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                *
2165            KK     D06BASIN
2166            KM        BASIN BOUNDARY FROM SUN CITY GRAND
2167            BA   0.463
2168            LG    0.22     0.19     6.60     0.18       32
2169            UI       0       62      202      329      441      705      609      449      329      192
2170            UI     104       70       34       18       19       19        0        0        0        0
2171            UI       0        0        0        0        0        0        0        0        0        0
2172            UI       0        0        0        0        0        0        0        0        0        0
2173            UI       0        0        0        0        0        0        0        0        0        0
                *

2174            KK  DD06REDIVERT
2175            KM        Master Drainage Report for Del Webb's Grand Avenue Property
2176            DT    RD06     32.0      0.0
2177            DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2178            DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

2179            KK  DD06SEDIVERT
2180            KM        Divert based on capacity at Bell Road. Bell Rd section from
2181            KM        Final Drainage Report for Westfield Commons Jan 2008
2182            DT   DD06S      0.0      0.0
2183            DI     0.0    100.0    200.0    300.0    370.0    400.0    800.0   1000.0  10000.0      0.0
2184            DQ     0.0      0.0      0.0      0.0      0.0     30.0    430.0    630.0   9630.0      0.0
                *

2185            KK  D06D07ROUTE
2186            KM        Cross-section: Cross-section determined from aerial
2187            KM        Manning's N Value: street and ROW, left overbank is
2188            KM        earth with sparse trees and shrubs
2189            RS       1     FLOW
2190            RC   0.013    0.013    0.013     2785   0.0052     0.00
2191            RX  100.00   100.10   118.70   118.80   165.00   211.10   211.20   230.00
2192            RY  1266.0  1264.00  1263.74  1263.24  1264.00  1263.50  1264.00  1264.38
                *
1                                          HEC-1 INPUT                                                    PAGE 56

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

2193            KK     D07BASIN
2194            KM        BASIN BOUNDARY FROM SUN CITY GRAND
2195            BA   0.886
2196            LG    0.21     0.23     6.20     0.22       27
2197            UI       0       85      162      361      465      582      741     1047      875      683
2198            UI     548      437      297      162      142       85       62       26       27       26
2199            UI      26        0        0        0        0        0        0        0        0        0
2200            UI       0        0        0        0        0        0        0        0        0        0
2201            UI       0        0        0        0        0        0        0        0        0        0
                *

2202            KK  DD07REDIVERT
2203            KM        Master Drainage Report for Del Webb's Grand Avenue Property
2204            DT    RD07     61.2      0.0
2205            DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2206            DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

2207            KK   CPD07COMBINE
2208            HC       2    1.349
                *

2209            KK  D07D02ROUTE
2210            KM        Cross-section: Estimated 3' deep, side slopes and width based
2211            KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
2212            RS       1     FLOW
2213            RC   0.032    0.032    0.032     1520   0.0013     0.00
2214            RX  100.00   100.10   100.20   133.00   156.00   174.80   174.90   175.00
2215            RY  1001.0   999.90   999.80   997.00   997.10   999.80   999.90  1001.00
                *

2216            KK     D01BASIN
2217            KM        BASIN BOUNDARY FROM SUN CITY GRAND
2218            BA   1.564
2219            LG    0.21     0.26     5.10     0.33       24
2220            UI       0      130      179      482      645      784      929     1194     1657     1358
2221            UI    1107      924      751      601      413      231      214      143      128       40
2222            UI      41       40       40       40       41        0        0        0        0        0
2223            UI       0        0        0        0        0        0        0        0        0        0
2224            UI       0        0        0        0        0        0        0        0        0        0
                *

2225            KK  DD01REDIVERT
2226            KM        Master Drainage Report for Del Webb's Grand Avenue Property
2227            DT    RD01     97.0      0.0
2228            DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2229            DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *
1                                          HEC-1 INPUT                                                    PAGE 57

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

2230            KK  D01D02ROUTE
2231            KM        Cross-section: Golf course, assumed 0.5% side slopes, V-ditch
2232            KM        Manning's N Value: golf course
2233            RS      17     FLOW
2234            RC   0.025    0.025    0.025     9289   0.0038     0.00
2235            RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
2236            RY  1000.0   999.50   998.50   998.00   998.30   998.50   999.50  1000.00
                *

2237            KK     D02BASIN
2238            KM        BASIN BOUNDARY FROM SUN CITY GRAND
2239            BA   1.844
2240            LG    0.21     0.26     5.40     0.29       28
2241            UI       0      170      295      687      895     1095     1371     1978     1914     1473
2242            UI    1195      973      750      439      296      239      169       91       52       52
2243            UI      53       52        0        0        0        0        0        0        0        0
2244            UI       0        0        0        0        0        0        0        0        0        0
2245            UI       0        0        0        0        0        0        0        0        0        0
                *

2246            KK  DD02REDIVERT
2247            KM        Master Drainage Report for Del Webb's Grand Avenue Property
2248            DT    RD02    125.6      0.0
2249            DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2250            DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
```

```
                *

2251            KK   CPD02COMBINE
2252            HC       3   4.757
                *

2253            KK  D02D10ROUTE
2254            KM        Cross-section: Channel is 2.5' deep with 25' bottom width
2255            KM        and has 4:1 side slopes per Mountain Vista Ranch Drainage Proposal
2256            KM        for Reems Road  / Manning's N Value: earth w/ sparse trees and brush
2257            RS       3    FLOW
2258            RC   0.032   0.032   0.032    5395  0.0037    0.00
2259            RX  100.00  102.50  105.00  110.00  120.00  125.00  127.50  130.00
2260            RY  1242.0 1241.00 1240.00 1238.00 1237.90 1240.00 1241.00 1242.00
                *

2261            KK     D09BASIN
2262            KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
2263            BA   0.265
2264            LG    0.25    0.25    5.70    0.24      35
2265            UI       0      39     152     229     337     460     321     222     136      67
2266            UI      42      16      12      12       0       0       0       0       0       0
2267            UI       0       0       0       0       0       0       0       0       0       0
2268            UI       0       0       0       0       0       0       0       0       0       0
2269            UI       0       0       0       0       0       0       0       0       0       0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2270            KK  DD09REDIVERT
2271            KM        Drainage Report for Montain Vista Ranch
2272            DT    RD09    15.8     0.0
2273            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2274            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

2275            KK  D09D10ROUTE
2276            KM        Cross-section: Estimated V-ditch w/ 4:1 side slopes
2277            KM        Manning's N Value: earth with grass, sparse trees and shrubs
2278            RS       1    FLOW
2279            RC   0.025   0.025   0.032    1657  0.0043    0.00
2280            RX  100.00  105.00  110.00  130.00  150.00  160.00  165.00  167.00
2281            RY  1000.0  999.90  999.80  996.80  996.70  998.70  999.80 1000.00
                *

2282            KK  DD06SERETRIEVE
2283            DR   DD06S
                *

2284            KK  D06D10ROUTE
2285            KM        Cross-section: From Final Drainage Report for Westfield Commons
2286            RS       1    FLOW
2287            RC   0.030   0.030   0.030    8002  0.0044    0.00
2288            RX  100.00  109.00  113.00  118.00  125.00  131.00  137.00  142.00
2289            RY  1240.0 1239.82 1238.04 1236.26 1236.16 1238.04 1239.60 1240.82
                *

2290            KK     D10BASIN
2291            KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
2292            KM        COMMERCIAL DEVLP AND AG LANG
2293            BA   0.628
2294            LG    0.24    0.26    5.80    0.23      34
2295            UI       0      80     252     417     553     850     871     628     468     316
2296            UI     155     112      69      24      25      24       0       0       0       0
2297            UI       0       0       0       0       0       0       0       0       0       0
2298            UI       0       0       0       0       0       0       0       0       0       0
2299            UI       0       0       0       0       0       0       0       0       0       0
                *

2300            KK  DD10REDIVERT
2301            KM        Mountain Vista Ranch Drainage Proposal for Reems Road
2302            KM        Drainage Report for Montain Vista Ranch, Final Drainage Report Westfiel
2303            KM        Commons Final Drainage Report for Greenway & Reems, Final Drainage
2304            KM        Report for the Interim Condition for Westfield Commons Subd
2305            DT    RD10    37.8     0.0
2306            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2307            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                          HEC-1 INPUT                                          PAGE 59

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

2308            KK   CPD10COMBINE
2309            HC       4    5.65
                *

2310            KK  D10D19ROUTE
2311            KM        Cross-section: Cross-section from Drainage Report for Channelization
2312            KM        of Reems Road (Report 691) / Manning's N Value: channel w/ grass
2313            KM        bottom and riprap sides
2314            RS       3    FLOW
2315            RC   0.022   0.022   0.022    5364  0.0027    0.00
2316            RX  100.00  107.60  115.20  122.80  130.80  138.40  146.00  153.60
2317            RY  1220.0 1218.00 1216.00 1214.00 1213.90 1216.00 1218.00 1220.00
                *

2318            KK     D08BASIN
2319            KM        BASIN BOUNDARY FROM LOOP 303 AND NORTHWEST RANCH
2320            BA   0.514
2321            LG    0.28    0.26    5.40    0.29      30
2322            UI       0      44      62     162     219     264     316     417     549     440
2323            UI     357     300     242     190     120      75      69      44      35      13
2324            UI      13      14      13      13       0       0       0       0       0       0
2325            UI       0       0       0       0       0       0       0       0       0       0
2326            UI       0       0       0       0       0       0       0       0       0       0
                *

2327            KK  DD08REDIVERT
2328            KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A on
2329            KM        Basin B/C same as Tract O), Final Drainage Report for Parcel 13 of
2330            KM        Surprise Farms (Tract O, P), Final Drainage Report for Surprise Farms
2331            KM        Parcel 9 (Tract K and 9), Final Drainage R
2332            DT    RD08    26.0     0.0
2333            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2334            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
```

```
2335        KK  D08D16ROUTE
2336        KM        Cross-section: Ag field, assumed 0.5% side slopes
2337        KM        V-ditch / Manning's N Value: Ag field
2338        RS      11    FLOW
2339        RC   0.038   0.038   0.038    5348  0.0053    0.00
2340        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2341        RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
            *

2342        KK     D16BASIN
2343        KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
2344        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2345        KM        Manning's N Value: Ag. Field
2346        BA   0.517
2347        LG    0.48    0.25    4.90    0.43       5
2348        UI       0      32      32      50      81     146     188     187     240     264
2349        UI     269     273     262     223     240     217     167     186     128     117
2350        UI      94      96      74      57      52      41      40      31      29      29
2351        UI      18      18      19      18       9       4       4       4       4       4
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2352        UI       4       4       4       4       4       4       4       4       4       4
            *

2353        KK   CPD16COMBINE
2354        HC       2   1.031
            *

2355        KK   DD161DIVERT
2356        KM        Waddell at Sarival split flow
2357        DT  DD161S     0.0     0.0
2358        DI     0.0    52.0   492.4  1578.2  3317.0     0.0     0.0     0.0     0.0     0.0
2359        DQ     0.0    38.3   403.6  1166.1  2341.9     0.0     0.0     0.0     0.0     0.0
            *

2360        KK   DD162DIVERT
2361        KM        Waddell at Sarival split flow
2362        DT  DD162S     0.0     0.0
2363        DI     0.0    13.7    88.8   412.0   975.1     0.0     0.0     0.0     0.0     0.0
2364        DQ     0.0     7.4    32.2    66.7   108.7     0.0     0.0     0.0     0.0     0.0
            *

2365        KK  D16D18ROUTE
2366        KM        Cross-section: Cross-section determined from aerial
2367        KM        Manning's N Value: street and ROW
2368        RS       3    FLOW
2369        RC   0.032   0.013   0.013    2183  0.0035    0.00
2370        RX  100.00  101.00  102.00  148.00  148.10  176.00  177.00  178.00
2371        RY  1000.0  999.90  999.80  999.70  999.20  999.80  999.90 1000.00
            *

2372        KK     D18BASIN
2373        KM        BASIN BOUNDARY FROM LEGACY PARK
2374        BA   0.199
2375        LG    0.25    0.25    4.60    0.39      30
2376        UI       0      83     260     477     382     211      74      30      15       0
2377        UI       0       0       0       0       0       0       0       0       0       0
2378        UI       0       0       0       0       0       0       0       0       0       0
2379        UI       0       0       0       0       0       0       0       0       0       0
2380        UI       0       0       0       0       0       0       0       0       0       0
            *

2381        KK  DD18REDIVERT
2382        KM        Master Drainage Report for Legacy Parc (has excess retention)
2383        DT    RD18    17.2     0.0
2384        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2385        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2386        KK   CPD18COMBINE
2387        HC       2    1.23
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2388        KK  D18D19ROUTE
2389        KM        Cross-section: Cross-section determined from aerial
2390        KM        Cross-section: Cross-section determined from aerial / Manning's N Value:
2391        RS       2    FLOW
2392        RC   0.032   0.013   0.013    2766  0.0024    0.00
2393        RX  100.00  101.00  132.50  133.00  133.10  151.00  152.00  153.00
2394        RY  1000.1 1000.00  999.50  999.40  998.90  999.30  999.40  999.50
            *

2395        KK     D17BASIN
2396        KM        BASIN BOUNDARY FROM LEGACY PARK
2397        BA   0.197
2398        LG    0.25    0.25    3.95    0.40      30
2399        UI       0      88     269     487     369     197      69      25      15       0
2400        UI       0       0       0       0       0       0       0       0       0       0
2401        UI       0       0       0       0       0       0       0       0       0       0
2402        UI       0       0       0       0       0       0       0       0       0       0
2403        UI       0       0       0       0       0       0       0       0       0       0
            *

2404        KK  DD17REDIVERT
2405        KM        Master Drainage Report for Kenly Farms Subdivision, Master Drainage Repo
2406        KM        Legacy Parc (has excess retention)
2407        DT    RD17    16.5     0.0
2408        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2409        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2410        KK  D17D19ROUTE
2411        KM        Cross-section: Cross-section from Drainage Report for Channelization of
2412        KM        Reems Road (Report 691) / Manning's N Value: channel w/ grass
2413        KM        bottom and riprap sides
2414        RS      18    FLOW
2415        RC   0.032   0.025   0.032    5422  0.0042    0.00
2416        RX  100.00  101.00  102.00  125.00  133.00  156.00  157.00  159.00
2417        RY  1000.0  999.90  999.80  993.80  993.70  999.80  999.90 1000.00
            *

2418        KK     D19BASIN
2419        KM        BASIN BOUNDARY FROM TASH, WADDEL SQUARE, LME,  AND SCHOOL
2420        BA   0.506
```

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2421          LG    0.27    0.26    4.65    0.38      26
2422          UI       0      69     175     383     535     590     521     461     355     232
2423          UI     180     114      81      64      41      39       9       8       9       9
2424          UI       8       9       9       8       9       0       0       0       0       0
2425          UI       0       0       0       0       0       0       0       0       0       0
2426          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2427          KK  DD19REDIVERT
2428          KM        Drainage Report for Greenway Parc at Surprise One, Final Drainage Report
2429          KM        Retail Center for Venture Development  SP06-411, Stormwater Management R
2430          KM        Jack in the Box, Final Drainage Report for Greenway Parc at Surprise Th
2431          KM        Report for Greenway Parc at Surprise Two, Drainage Report for Walgreens
2432          KM        Waddell & Reems Case # SPA04-297, Drainage Report for Waddell Square, F
2433          KM        Drainage Report for Waddell Square Phase 2-Wells Fargo, Final Drainage R
2434          KM        Waddell Square NWC Reems and Waddell, Final Drainage Report for Tash
2435          DT    RD19    33.7     0.0
2436          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2437          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2438          KK   CPD19COMBINE
2439          HC       4   7.583
              *

2440          KK  D19D30ROUTE
2441          KM        Cross-section: Cross-section determined from
2442          KM        FEMA CLOMR submittal for Greer Ranch
2443          RS       3    FLOW
2444          RC   0.022   0.022   0.022    5320  0.0045    0.00
2445          RX  100.00  112.00  124.00  136.00  201.00  209.00  217.00  225.00
2446          RY  1194.0 1192.00 1190.00 1188.00 1187.90 1190.00 1192.00 1194.00
              *

2447          KK     D29BASIN
2448          KM        BASIN BOUNDARY FROM LOOP 303, AERIAL PHOTOGRAPHY
2449          KM        OF AG LAND AND FROM 1990 TOPO
2450          BA   0.509
2451          LG    0.47    0.25    4.60    0.50       4
2452          UI       0      32      32      50      83     148     187     188     239     268
2453          UI     268     267     258     222     239     205     170     177     124     112
2454          UI      93      98      65      55      49      40      38      30      29      25
2455          UI      18      18      18      18       4       4       4       4       4       4
2456          UI       4       4       4       4       4       4       4       4       4       4
              *

2457          KK   DD161RETRIEVE
2458          DR  DD161S
              *

2459          KK  D16D29ROUTE
2460          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2461          KM        Manning's N Value: Ag field
2462          RS       9    FLOW
2463          RC   0.038   0.038   0.038    5295  0.0038    0.00
2464          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2465          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2466          KK   CPD29COMBINE
2467          HC       2    1.54
              *

2468          KK  D29D30ROUTE
2469          KM        Cross-section: Cross-section determined from aerial
2470          KM        Manning's N Value: earth w/ grass
2471          RS       4    FLOW
2472          RC   0.025   0.025   0.025    4849  0.0054    0.00
2473          RX  100.00  103.00  106.00  108.00  112.00  114.00  135.50  153.50
2474          RY  1177.0 1176.50 1176.00 1175.00 1174.90 1176.00 1175.50 1176.90
              *

2475          KK     D30BASIN
2476          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT,
2477          KM        FCDMC, WESTERN BOUNDARY FROM LOOP 303
2478          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2479          BA   0.914
2480          LG    0.49    0.25    4.80    0.45       0
2481          UI       0      49      49      54     102     152     246     290     282     379
2482          UI     369     415     405     410     400     341     348     380     256     266
2483          UI     264     192     178     147     138     141      94      82      78      62
2484          UI      60      50      45      45      37      28      28      27      28      21
2485          UI       6       6       6       6       6       7       6       6       6       6
              *

2486          KK   DD162RETRIEVE
2487          DR  DD162S
              *

2488          KK  D16D30ROUTE
2489          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2490          KM        Manning's N Value: Ag field
2491          RS      19    FLOW
2492          RC   0.038   0.038   0.038    7187  0.0070    0.00
2493          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2494          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

2495          KK   CPD30COMBINE
2496          HC       4   9.006
              *

2497          KK  D30D46ROUTE
2498          KM        Cross-section: Cross-section determined from aerial
2499          KM        Manning's N Value: earth w/ sparse trees and brush
2500          RS       3    FLOW
2501          RC   0.022   0.022   0.022    5376  0.0045    0.00
2502          RX  100.00  112.00  124.00  136.00  201.00  209.00  217.00  225.00
2503          RY  1158.0 1156.00 1154.00 1152.00 1151.90 1154.00 1156.00 1158.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2504          KK     D45BASIN
2505          KM        BASIN BOUNDARY FROM SYCAMORE FARMS PARCELS,  WESTERN BOUNDARY
2506          KM        FROM LOOP 303, FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2507          BA   0.488
2508          LG    0.36     0.25     4.80     0.40       19
2509          UI       0       41       54      147      199      242      286      361      513      428
2510          UI     346      293      234      193      133       73       68       47       41       15
2511          UI      13       12       13       12       13        0        0        0        0        0
2512          UI       0        0        0        0        0        0        0        0        0        0
2513          UI       0        0        0        0        0        0        0        0        0        0
              *

2514          KK  DD45REDIVERT
2515          KM        Final Drainage Report for The Retreat at Sycamore Farms
2516          KM        Final Drainage Report for Sycamore Farms Parcel 13
2517          DT    RD45     17.9      0.0
2518          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2519          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2520          KK   DD451DIVERT
2521          KM        Peoria at Sarival split flow
2522          DT  DD451S      0.0      0.0
2523          DI     0.0    150.2    433.6    936.5   1656.8      0.0      0.0      0.0      0.0      0.0
2524          DQ     0.0     21.3     74.4    178.2    352.6      0.0      0.0      0.0      0.0      0.0
              *

2525          KK   DD452DIVERT
2526          KM        Peoria at Sarival split flow
2527          DT  DD452S      0.0      0.0
2528          DI     0.0    128.9    359.2    758.3   1304.2      0.0      0.0      0.0      0.0      0.0
2529          DQ     0.0     64.4    133.4    217.4    313.9      0.0      0.0      0.0      0.0      0.0
              *

2530          KK  D45D46ROUTE
2531          KM        Cross-section: Cross-section determined from aerial
2532          KM        Manning's N Value: earth w/ sparse trees and brush
2533          RS       6     FLOW
2534          RC   0.032    0.032    0.032     4898   0.0041     0.00
2535          RX  100.00   100.10   100.20   110.00   160.00   170.00   171.00   172.00
2536          RY  1000.2  1000.10  1000.00   997.00   997.10  1000.00  1000.10  1000.20
              *

2537          KK     D46BASIN
2538          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT, FCDMC
2539          KM        GREER RANCH NORTH PHASES AND 1990 TOPO
2540          BA   0.918
2541          LG    0.26     0.24     4.70     0.37       29
2542          UI       0       85      155      349      455      565      707     1019      940      725
2543          UI     588      472      356      199      147      110       86       33       26       26
2544          UI      27       26        0        0        0        0        0        0        0        0
2545          UI       0        0        0        0        0        0        0        0        0        0
2546          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2547          KK  DD46REDIVERT
2548          KM        Preliminary Drainage Report for Greer Ranch North
2549          KM        Remaining retention volume estimated based on aerial
2550          DT    RD46     75.9      0.0
2551          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2552          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2553          KK   CPD46COMBINE
2554          HC       3   10.412
              *

2555          KK  D46D58ROUTE
2556          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
2557          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
2558          RS       1     FLOW
2559          RC   0.022    0.022    0.022     2200   0.0011     0.00
2560          RX    0.00     5.00    25.00    90.00   110.00   185.00   200.00   201.00
2561          RY  1146.0  1145.00  1144.50  1137.00  1136.90  1145.00  1145.00  1146.00
              *

2562          KK  RMSBSNDIVERT
2563          KM        Divet side weir flows into Reems Road Basin
2564          DT  SSPILL      0.0      0.0
2565          DI     0.0    371.0    512.0    724.0   1062.0   2173.0   2607.0   2728.0      0.0      0.0
2566          DQ     0.0    152.0     27.0    416.0    669.0   1501.0      0.0      0.0      0.0      0.0
              *

2567          KK  RMSBSNRETRIEVE
2568          DR  SSPILL
              *

2569          KK  SRREEMSTORAGE
2570          KM        Reems Road Basin
2571          KO
2572          RS       1     STOR
2573          SV            11.50    55.40   202.00   228.00   256.00
2574          SQ            12.50    38.00    76.20   129.00  1583.00
2575          SE  1125.0  1127.00  1129.50  1136.00  1137.00  1138.00
2576          ST
              *

2577          KK   CPRMSCOMBINE
2578          HC       2   10.412
              *

2579          KK    RRMSROUTE
2580          KM        Reems Road Channel
2581          RS       1     FLOW
2582          RC   0.035    0.035    0.035     1358   0.0011     0.00
2583          RX  100.00   105.00   130.00   190.00   210.00   270.00   285.00   290.00
2584          RY  1135.0  1124.00  1134.00  1127.00  1127.10  1134.50  1134.60  1135.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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2585          KK     D57BASIN
2586          KM        BASIN BOUNDARYFROM LOOP 303
2587          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2588          BA   0.481
2589          LG    0.48     0.25     4.35     0.59        5
2590          UI       0       30       31       48       80      143      178      183      232      255
2591          UI     253      256      241      212      226      192      162      162      118      102
2592          UI      87       93       57       51       46       37       35       27       28       22
2593          UI      17       17       17       13        4        4        4        3        4        4
2594          UI       4        4        4        3        4        4        4        4        3        4
              *

2595          KK   DD451RETRIEVE
2596          DR  DD451S
              *

2597          KK  D45D57ROUTE
2598          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
2599          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
2600          RS       7    FLOW
2601          RC   0.032   0.032   0.032   5208  0.0034    0.00
2602          RX  100.00  112.00  124.00  130.00  138.00  144.00  156.00  168.00
2603          RY  1156.0 1155.80 1155.50 1153.50 1153.60 1155.50 1155.80 1156.00
              *

2604          KK   CPD57COMBINE
2605          HC       2   0.969
              *

2606          KK  D57D58ROUTE
2607          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
2608          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and shrubs; str
2609          RS       4    FLOW
2610          RC   0.032   0.032   0.013    4894  0.0047    0.00
2611          RX  100.00  101.00  324.00  340.00  348.00  360.00  375.00  390.00
2612          RY  1140.7 1140.30 1140.00 1137.00 1137.10 1140.00 1140.10 1140.70
              *

2613          KK     D58BASIN
2614          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2615          KM        AND TWELVE OAK ESTATES
2616          BA   0.919
2617          LG    0.44     0.25     4.70     0.44        4
2618          UI       0       55       56       83      135      247      326      310      427      439
2619          UI     467      472      467      400      397      430      292      316      258      213
2620          UI     178      156      163      108       91       83       69       65       50       52
2621          UI      41       32       32       31       31        9        7        7        7        7
2622          UI       7        7        7        7        7        7        7        7        7        7
              *
1                                          HEC-1 INPUT                                                    PAGE 67

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

2623          KK   DD452RETRIEVE
2624          DR  DD452S
              *

2625          KK  D45D58ROUTE
2626          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
2627          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
2628          RS      20    FLOW
2629          RC   0.038   0.038   0.038    7224  0.0055    0.00
2630          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2631          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

2632          KK   CPD58COMBINE
2633          HC       4  11.812
              *

2634          KK  D5869AROUTE
2635          KM        Cross-section: determined from HEC-RAS 100% Channel Steady
2636          KM        Model, Reems CLOMR, given to HDR by FCDMC on May 5, 2009
2637          RS       3    FLOW
2638          RC   0.035   0.035   0.035    5296  0.0038    0.00
2639          RX  9932.0 9945.20 9964.30 9970.5010024.0010027.0010042.0010057.00
2640          RY  1120.5 1117.10 1113.80 1112.50 1112.40 1113.40 1117.00 1120.50
              *

2641          KK    D68ABASIN
2642          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2643          BA   0.242
2644          LG    0.48     0.25     4.10     0.68        4
2645          UI       0       29       62      154      198      249      250      211      185      147
2646          UI     100       81       51       39       29       22       17       14        4        3
2647          UI       4        4        3        4        4        3        4        0        0        0
2648          UI       0        0        0        0        0        0        0        0        0        0
2649          UI       0        0        0        0        0        0        0        0        0        0
              *

2650          KK  68A69AROUTE
2651          KM        Cross-section: Cross-section determined from ATSF.OUT
2652          KM        received from FCDMC on April 24, 2009-R192B
2653          RS       3    FLOW
2654          RC   0.025   0.025   0.025    4893  0.0030    0.00
2655          RX  1500.0 1501.00 1588.00 1600.00 1612.00 1630.00 1699.00 1700.00
2656          RY  1146.0 1145.00 1145.00 1142.00 1142.00 1145.00 1145.00 1146.00
              *

2657          KK    D69ABASIN
2658          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2659          BA   0.463
2660          LG    0.50     0.25     4.55     0.52        0
2661          UI       0       40       50      103      208      234      305      335      339      308
2662          UI     289      260      222      171      138      115       92       68       54       47
2663          UI      37       33       22       23       21        5        5        5        5        5
2664          UI       5        5        5        5        5        5        5        5        5        0
1                                          HEC-1 INPUT                                                    PAGE 68

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

2665          UI       0        0        0        0        0        0        0        0        0        0
              *

2666          KK  CPD69ACOMBINE
2667          HC       3  12.517
              *

2668          KK  D69A70ROUTE
```

```
2669          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2670          KM        Manning's N Value: avg value for cultivated areas from Estimated
2671          KM        Manning's Roughness Coefficient for Stream Channels and Flood Plains in
2672          RS       8    FLOW
2673          RC   0.038   0.038   0.038    5072  0.0024    0.00
2674          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2675          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2676          KK     D68BASIN
2677          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM
2678          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2679          BA   0.252
2680          LG    0.46    0.24    4.10    0.66       4
2681          UI       0      24      34      76     135     165     188     200     195     169
2682          UI     159     136      95      76      70      44      36      30      22      21
2683          UI      14      13      11       3       3       3       3       3       3       3
2684          UI       3       3       3       3       3       0       0       0       0       0
2685          UI       0       0       0       0       0       0       0       0       0       0
              *

2686          KK   DD681DIVERT
2687          KM        Northern at Sarival split flow
2688          DT  DD681S     0.0     0.0
2689          DI     0.0   250.0  1230.1  3091.5  6023.2     0.0     0.0     0.0     0.0     0.0
2690          DQ     0.0   197.3   899.3  2174.8  3885.3     0.0     0.0     0.0     0.0     0.0
              *

2691          KK   DD682DIVERT
2692          KM        Northern at Sarival split flow
2693          DT  DD682S     0.0     0.0
2694          DI     0.0    52.7   330.8   916.7  2138.0     0.0     0.0     0.0     0.0     0.0
2695          DQ     0.0    17.6    39.4    66.5    97.9     0.0     0.0     0.0     0.0     0.0
              *

2696          KK  D68D69ROUTE
2697          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
2698          KM        on aerial & topo / Manning's N Value: clean earth; straight, street ROB
2699          RS       5    FLOW
2700          RC   0.022   0.022   0.016    4930  0.0045    0.00
2701          RX  100.00  120.00  140.00  152.00  154.00  166.00  176.00  186.00
2702          RY  1121.2 1121.10 1121.00 1118.00 1118.10 1121.00 1121.10 1121.20
              *
```

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

2703          KK     D69BASIN
2704          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
2705          BA   0.462
2706          LG    0.49    0.24    4.60    0.50       0
2707          UI       0      29      29      46      74     136     169     173     218     242
2708          UI     244     244     234     202     215     187     155     159     113     101
2709          UI      84      89      58      50      45      36      35      26      27      22
2710          UI      16      17      16      15       4       4       3       4       4       3
2711          UI       4       3       4       4       3       4       4       3       4       4
              *

2712          KK   CPD69COMBINE
2713          HC       2   0.714
              *

2714          KK   DD691DIVERT
2715          KM        Northern at Reems split flow
2716          DT  DD691S     0.0     0.0
2717          DI     0.0  1524.4  3177.7  5722.8  8992.0     0.0     0.0     0.0     0.0     0.0
2718          DQ     0.0   127.3   360.0   873.5  1631.7     0.0     0.0     0.0     0.0     0.0
              *

2719          KK   DD692DIVERT
2720          KM        Northern at Reems split flow
2721          DT  DD692S     0.0     0.0
2722          DI     0.0  1397.1  2817.7  4849.3  7360.3     0.0     0.0     0.0     0.0     0.0
2723          DQ     0.0   102.5   198.8   314.3   446.2     0.0     0.0     0.0     0.0     0.0
              *

2724          KK  D69D70ROUTE
2725          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2726          KM        Manning's N Value: avg value for cultivated areas
2727          RS       3    FLOW
2728          RC   0.032   0.032   0.013    2823  0.0021    0.00
2729          RX  100.00  101.00  300.00  308.00  318.00  326.00  336.00  346.00
2730          RY  1102.5 1101.90 1101.80 1098.00 1098.10 1101.80 1102.00 1102.50
              *

2731          KK     D70BASIN
2732          KM        FALCON DUNES
2733          BA   0.259
2734          LG    0.11    0.25    4.80    0.47       5
2735          UI       0      74     291     457     432     318     184      98      60      37
2736          UI      19       7       7       7       7       7       0       0       0       0
2737          UI       0       0       0       0       0       0       0       0       0       0
2738          UI       0       0       0       0       0       0       0       0       0       0
2739          UI       0       0       0       0       0       0       0       0       0       0
              *
```

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

2740          KK    D70ABASIN
2741          KM        Basin bounded to south by Falcon Dunes
2742          BA   0.266
2743          LG    0.49    0.25    4.80    0.45       2
2744          UI       0      22      25      53     102     127     159     180     186     182
2745          UI     153     169     114     119      85      68      66      43      35      29
2746          UI      25      20      18      13      12      13       3       3       3       3
2747          UI       2       3       3       3       2       3       3       2       3       3
2748          UI       3       0       0       0       0       0       0       0       0       0
              *

2749          KK  D70A70ROUTE
2750          KM        Cross-section: Falcon Dunes, assumed 0.5% side slopes, V-ditch
2751          KM        Manning's N Value: avg value for cultivated areas
2752          RS       9    FLOW
2753          RC   0.038   0.038   0.038    3363  0.0024    0.00
2754          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2755          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
```

```
2756          KK   CPD70COMBINE
2757          HC       4  13.756
              *

2758          KK   SRD70STORAGE
2759          KM       Falcon  Dunes. Storage recalc'd by FCDMC 3/2009
2760          KO
2761          RS       1    STOR
2762          SV            0.10    0.80    2.70    6.60   17.30   38.40   69.90  141.80  285.90
2763          SQ                                                   67.00  160.00  300.00  453.00
2764          SE  1079.0 1081.00 1083.00 1085.00 1087.00 1089.90 1092.50 1094.50 1097.00 1100.00
2765          ST
              *

2766          KK  D70D71ROUTE
2767          KM       Dysart Drain
2768          KM       As Built Plans FCD No 94-38, May 1995
2769          KM       Manning's N Value: concrete channel
2770          RS       1    FLOW
2771          RC   0.013   0.013   0.013    2520  0.0011    0.00
2772          RX  100.00  107.00  110.00  113.00  123.00  126.00  129.00  136.00
2773          RY  1094.5 1089.80 1087.80 1085.80 1085.70 1087.80 1089.80 1094.50
              *

2774          KK     D71BASIN
2775          KM       BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
2776          BA   0.241
2777          LG    0.45    0.24    4.80    0.43       1
2778          UI       0      21      28      58     120     127     169     178     182     158
2779          UI     157     126     116      83      65      62      39      33      26      22
2780          UI      20      13      12      12       4       3       3       2       3       2
2781          UI       3       3       2       3       3       2       3       3       0       0
2782          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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

2783          KK   CPD71COMBINE
2784          HC       2  13.997
              *

2785          KK  D71D72ROUTE
2786          KM       Dysart Drain
2787          KM       As Built Plans FCD No 94-38, May 1995
2788          KM       Manning's N Value: concrete channel
2789          RS       1    FLOW
2790          RC   0.013   0.013   0.013    2698  0.0011    0.00
2791          RX  100.00  109.00  112.00  115.00  139.00  142.00  145.00  152.50
2792          RY  1090.0 1084.00 1082.00 1080.00 1079.90 1082.00 1084.00 1089.00
              *

2793          KK     D59BASIN
2794          KM       BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
2795          KM       1990 TOPO, AND BNSF RR ALIGNMENT
2796          BA   0.993
2797          LG    0.49    0.25    4.80    0.45       1
2798          UI       0      47      48      47      86     113     185     251     285     275
2799          UI     376     349     394     394     399     399     363     331     342     363
2800          UI     262     248     284     196     180     160     139     137     137      91
2801          UI      82      76      67      58      58      45      43      43      38      27
2802          UI      27      27      26      27      15       5       6       6       6       6
              *

2803          KK  DD47SERETRIEVE
2804          DR   DD47S
              *

2805          KK  D47D59ROUTE
2806          KM       Cross-section: Cross-section determined from aerial & topo
2807          KM       Manning's N Value: clean earth; straight
2808          RS       5    FLOW
2809          RC   0.022   0.022   0.022    5274  0.0046    0.00
2810          RX  100.00  107.00  114.00  122.00  162.00  170.00  190.00  210.00
2811          RY  1118.5 1118.30 1118.00 1114.00 1114.40 1118.00 1118.30 1118.50
              *

2812          KK   CPD59COMBINE
2813          HC       2   4.988
              *

2814          KK  DD59SEDIVERT
2815          KM       Olive at Bullard split flow
2816          DT   DD59S     0.0     0.0
2817          DI     0.0   578.9  2379.7  5553.1  9800.2     0.0     0.0     0.0     0.0     0.0
2818          DQ     0.0   549.4  2103.3  4574.6  7763.0     0.0     0.0     0.0     0.0     0.0
              *
```



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

2819          KK  D59D61ROUTE
2820          KM       Cross-section: Cross-section estimated from aerial and
2821          KM       topo-road / Manning's N Value: clean earth; straight, street ROB
2822          RS       4    FLOW
2823          RC   0.022   0.022   0.016    2759  0.0007    0.00
2824          RX  100.00  108.00  116.00  122.00  128.00  132.00  144.00  156.00
2825          RY  1113.0 1112.50 1112.00 1110.00 1110.10 1112.00 1112.30 1112.50
              *

2826          KK     D61BASIN
2827          KM       BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2828          KM       1990 TOPO, AND BNSF RR ALIGNMENT
2829          BA   0.348
2830          LG    0.50    0.25    4.55    0.52       0
2831          UI       0      17      18      17      34      46      75      98      96     110
2832          UI     131     144     144     145     146     141     120     122     131     107
2833          UI      90     102      76      67      58      50      52      47      32      29
2834          UI      28      23      21      20      16      16      16      10      10      10
2835          UI      10      10       7       2       2       2       2       3       2       2
              *

2836          KK   CPD61COMBINE
2837          HC       2   5.336
              *

2838          KK  D6172AROUTE
```

```
2839    KM        Cross-section: Cross-section determined from ATSF.OUT
2840    KM        received from FCDMC on April 24, 2009-R181
2841    RS       1    FLOW
2842    RC   0.013   0.013   0.013    2640  0.0040    0.00
2843    RX    0.00   10.00   19.00   20.00   35.00   36.00   40.00   50.00
2844    RY  1104.0 1104.00 1104.00 1100.00 1100.00 1104.00 1104.00 1104.00
        *

2845    KK    D71ABASIN
2846    KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2847    BA   0.236
2848    LG    0.50    0.25    4.80    0.45       0
2849    UI       0      19      19      41      83     107     134     141     157     156
2850    UI     139     137     120     102      88      68      53      53      34      30
2851    UI      23      21      17      15      10      11      11       4       2       3
2852    UI       2       2       3       2       2       3       2       2       3       2
2853    UI       2       3       0       0       0       0       0       0       0       0
        *

2854    KK  DD59SERETRIEVE
2855    DR   DD59S
        *
```



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

2856    KK  D5971AROUTE
2857    KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2858    KM        Manning's N Value: avg value for cultivated areas
2859    RS       9    FLOW
2860    RC   0.038   0.038   0.038    5372  0.0037    0.00
2861    RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2862    RY  1078.0 1077.50 1076.50 1076.00 1076.30 1076.50 1077.50 1078.00
        *

2863    KK  CPD71ACOMBINE
2864    HC       2   5.224
        *

2865    KK  71A72AROUTE
2866    KM        Cross-section: Cross-section determined from ATSF.OUT
2867    KM        received from FCDMC on April 24, 2009-R194D
2868    RS       2    FLOW
2869    RC   0.025   0.025   0.025    2643  0.0030    0.00
2870    RX  1500.0 1501.00 1588.00 1600.00 1612.00 1630.00 1699.00 1700.00
2871    RY  1102.0 1101.00 1101.00 1098.00 1098.00 1101.00 1101.00 1102.00
        *

2872    KK    D72ABASIN
2873    KM        Boundary based on AT&SF CAR
2874    BA   0.254
2875    LG    0.50    0.25    4.70    0.47       0
2876    UI       0      20      21      45      87     116     144     151     169     166
2877    UI     150     149     129     109      95      73      58      57      37      32
2878    UI      25      23      18      16      12      11      12       5       2       3
2879    UI       2       3       2       3       2       3       2       3       2       3
2880    UI       2       2       3       0       0       0       0       0       0       0
        *

2881    KK  CPD72ACOMBINE
2882    HC       3   5.826
        *

2883    KK  D72A72ROUTE
2884    KM        Cross-section: Cross-section determined from ATSF.OUT
2885    KM        received from FCDMC on April 24, 2009-R195B
2886    RS       1    FLOW
2887    RC   0.013   0.013   0.013    2738  0.0040    0.00
2888    RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
2889    RY  1100.0 1100.00 1100.00 1096.00 1096.00 1100.00 1100.00 1100.00
        *

2890    KK     D72BASIN
2891    KM        Dysart Drain
2892    KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2893    KM        1990 TOPO AND BNSF RR ALIGNMENT
2894    BA   0.264
2895    LG    0.47    0.24    4.70    0.46       1
2896    UI       0      22      28      57     113     131     170     188     189     178
2897    UI     158     156     123     105      80      64      58      40      33      27
```



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

2898    UI      22      20      13      13      13       5       3       3       2       3
2899    UI       3       3       2       3       3       3       2       3       3       0
2900    UI       0       0       0       0       0       0       0       0       0       0
        *

2901    KK   CPD72COMBINE
2902    HC       3  20.087
        *

2903    KK  D72D73ROUTE
2904    KM        Dysart Drain
2905    KM        As Built Plans FCD No 94-38, May 1995
2906    KM        Manning's N Value: concrete channel
2907    RS       1    FLOW
2908    RC   0.013   0.013   0.013    3001  0.0045    0.00
2909    RX  100.00  112.00  116.00  120.00  128.00  132.00  136.00  148.00
2910    RY  1086.5 1080.50 1078.50 1076.50 1076.40 1078.50 1080.50 1086.50
        *

2911    KK     D73BASIN
2912    KM        Boundray based on Northern Parkway DCR and AT&SF CAR
2913    BA   0.280
2914    LG    0.45    0.25    4.65    0.48       4
2915    UI       0      16      17      30      59      75      87      97     113     128
2916    UI     157     207     193     160     141     125     105      94      80      66
2917    UI      47      29      28      27      17      16      13       5       5       5
2918    UI       5       5       5       5       5       0       0       0       0       0
2919    UI       0       0       0       0       0       0       0       0       0       0
        *

2920    KK   CPD73COMBINE
2921    HC       2  20.367
        *

2922    KK  D73D78ROUTE
```

```
2923          KM        Dysart Drain
2924          KM        As Built Plans FCD No 94-38, May 1995
2925          KM        Manning's N Value: concrete channel
2926          RS      2    FLOW
2927          RC   0.013   0.013   0.013    8062  0.0019    0.00
2928          RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
2929          RY  1073.0 1068.30 1064.30 1060.30 1060.20 1064.30 1068.30 1073.00
              *

2930          KK     B02BASIN
2931          KM        BASIN BOUNDARY FROM LUKE AFB HOUSING AND DYSART DRAIN
2932          BA   0.543
2933          LG   0.21    0.25    4.80    0.38      39
2934          UI      0      73     255     407     552     868     697     512     370     190
2935          UI    119      75      25      22      23       0       0       0       0       0
2936          UI      0       0       0       0       0       0       0       0       0       0
2937          UI      0       0       0       0       0       0       0       0       0       0
2938          UI      0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2939          KK  DB02REDIVERT
2940          KM        Retention volume estimated based on aerial
2941          DT    RB02    19.4     0.0
2942          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2943          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2944          KK  DB02SDDIVERT
2945          KM        DIVERT FROM GLENDALE TO DYSART DRAIN PER LUKE AFB
2946          KM        CAR BY HDR DATED OCTOBER 2004 FCD CONTRACT NO 2003C018
2947          DT  DB02LR     0.0     0.0
2948          DI     0.0   200.0   400.0   800.0   832.0  1200.0  5000.0     0.0     0.0     0.0
2949          DQ     0.0     0.0     0.0     0.0     0.0   368.0  4168.0     0.0     0.0     0.0
              *

2950          KK     B04BASIN
2951          KM        BASIN BOUNDARY FROM CAPISTRANO NORTH AND SOUTH
2952          KM        CASITAS BONITAS, LAFB HOUSING AND 1990 TOPO
2953          BA   0.315
2954          LG   0.27    0.27    4.60    0.38      23
2955          UI      0     468    1300     544     100       0       0       0       0       0
2956          UI      0       0       0       0       0       0       0       0       0       0
2957          UI      0       0       0       0       0       0       0       0       0       0
2958          UI      0       0       0       0       0       0       0       0       0       0
2959          UI      0       0       0       0       0       0       0       0       0       0
              *

2960          KK  DB04REDIVERT
2961          KM        Preliminary Drainage Report for Capistrano North
2962          KM        Drainage Report for Dysart Estates, Remaining
2963          KM        Retention Volume estimated from aerial
2964          DT    RB04     7.0     0.0
2965          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2966          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2967          KK  B04B02ROUTE
2968          KM        Cross-section: Route taken along Thunderbird Rd,
2969          KM        with walls on either side
2970          RS      5    FLOW
2971          RC   0.016   0.016   0.016    6392  0.0011    0.00
2972          RX  100.00  101.00  124.00  124.10  184.00  184.10  207.00  208.00
2973          RY  1090.0 1082.00 1081.90 1081.40 1081.30 1081.90 1082.00 1090.00
              *

2974          KK  DB02SDRETRIEVE
2975          DR  DB02LR
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2976          KK   CPB02COMBINE
2977          HC      2   0.858
              *

2978          KK  LR02SDDIVERT
2979          KM        DIVERT FROM LITCHFIELD RD FOR NEW STORM DRAIN SYSTEM PER
2980          KM        LUKE AFB CAR BY HDR DATED OCTOBER 2004 FCD CONTRACT NO 2003C018
2981          DT  LR02LR     0.0     0.0
2982          DI     0.0   200.0   400.0   800.0  1426.0  1500.0  5000.0     0.0     0.0     0.0
2983          DQ     0.0     0.0     0.0     0.0     0.0    74.0  3574.0     0.0     0.0     0.0
              *

2984          KK  LR2D78ROUTE
2985          KM        Cross-section: As-builts for Dysart Drain Improvements
2986          KM        Project Reems Rd to Agua Fria River Channel Improvements
2987          KM        FCD No 94-38, LAFB No 87-3002 dated May 1995,
2988          KM        from Litchfield Rd to Dysart Rd-No4
2989          RS      1    FLOW
2990          RC   0.013   0.013   0.013    8400  0.0019    0.00
2991          RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
2992          RY  1073.0 1068.30 1064.30 1060.30 1060.20 1064.30 1068.30 1073.00
              *

2993          KK    D78BBASIN
2994          KM        Boundray based on Northern Parkway DCR and AT&SF CAR
2995          BA   0.531
2996          LG   0.49    0.25    4.70    0.47       1
2997          UI      0      17      17      17      16      20      36      35      56      72
2998          UI     89     107      92      90     118     144     116     144     142     140
2999          UI    145     141     143     142     122     118     119     127     126     113
3000          UI     88      90      97      98      71      66      64      58      51      47
3001          UI     48      56      41      32      32      27      27      28      20      21
              *

3002          KK  CPD78BCOMBINE
3003          HC      5  32.084
              *

3004          KK  78B79BROUTE
3005          KM        Cross-section: As-builts for Dysart Drain Improvements
3006          KM        Project Reems Rd to Agua Fria River Channel Improvements
3007          KM        FCD No 94-38, LAFB No 87-3002 dated May 1995,
3008          KM        from Dysart Rd to El Mirage Rd-No2
```

```
3009        RS       1    FLOW
3010        RC   0.013   0.013   0.013    3524  0.0009    0.00
3011        RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
3012        RY  1068.0 1062.30 1058.30 1054.30 1054.20 1058.30 1062.30 1068.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3013        KK     D51BASIN
3014        KM        BASIN BOUNDARY FROM DYSART RANCHETTES AND DYSART HIGH SCHOOL
3015        BA   0.287
3016        LG    0.30    0.15    7.60    0.11      18
3017        UI       0      76     261     406     613     410     251     104      58      17
3018        UI      16       0       0       0       0       0       0       0       0       0
3019        UI       0       0       0       0       0       0       0       0       0       0
3020        UI       0       0       0       0       0       0       0       0       0       0
3021        UI       0       0       0       0       0       0       0       0       0       0
            *

3022        KK  DD51REDIVERT
3023        KM        Retention volume estimated based on aerial
3024        DT    RD51     5.9     0.0
3025        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3026        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

3027        KK  D51D65ROUTE
3028        KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
3029        KM        aerial & topo / Manning's N Value: clean earth; straight
3030        RS      10    FLOW
3031        RC   0.038   0.038   0.038    5303  0.0032    0.00
3032        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3033        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
            *

3034        KK     D65BASIN
3035        KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
3036        BA   0.695
3037        LG    0.50    0.25    5.00    0.41       0
3038        UI       0      39      39      49      81     142     208     224     249     295
3039        UI     325     329     324     327     285     271     296     231     208     213
3040        UI     157     142     114     114     104      74      64      59      48      48
3041        UI      36      35      36      22      22      22      22      20       5       5
3042        UI       5       5       5       5       5       4       5       5       5       5
            *

3043        KK   CPD65COMBINE
3044        HC       2   0.982
            *

3045        KK  D65D75ROUTE
3046        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3047        KM        Manning's N Value: avg value for cultivated areas from ""Est
3048        KM        Mng's Roughness Coefficient for Strm Chnls and Flood Plains in MC""
3049        RS      12    FLOW
3050        RC   0.038   0.038   0.038    5972  0.0020    0.00
3051        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3052        RY  1078.0 1077.50 1076.50 1076.00 1076.30 1076.50 1077.50 1078.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3053        KK    D79ABASIN
3054        KM       Boundray based on Aerial and Topo
3055        BA   0.175
3056        LG    0.41    0.31    4.70    0.37       0
3057        UI       0      19      44      97     142     177     184     169     133      98
3058        UI      75      57      40      32      22      18      13      10       5       4
3059        UI       5       5       4       0       0       0       0       0       0       0
3060        UI       0       0       0       0       0       0       0       0       0       0
3061        UI       0       0       0       0       0       0       0       0       0       0
            *

3062        KK     D75BASIN
3063        KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3064        KM        1990 TOPO, LUKE INDUSTRIAL PARK, CONTECT CONSTRUCTION PRODUCTS
3065        BA   0.883
3066        LG    0.39    0.26    4.80    0.43      15
3067        UI       0      55      56      86     139     253     323     324     410     460
3068        UI     459     467     448     386     410     363     288     315     216     197
3069        UI     161     167     118      98      89      68      69      50      50      46
3070        UI      31      31      32      31      11       7       7       6       7       7
3071        UI       7       7       7       7       7       7       6       7       7       7
            *

3072        KK   CPD75COMBINE
3073        HC       3    2.04
            *

3074        KK   SRD75STORAGE
3075        KM        PONDING EITHER NORTH OR SOUTH OF NORTHERN PARKWAY,
3076        KM        OUTLET PIPE IS 2-36"", SR198 PER ATSF.OUT
3077        KO
3078        RS       1    STOR
3079        SV            3.00    7.00   12.00   17.00   22.00   27.00   32.00
3080        SQ           16.00   40.00   76.00  104.00  304.00  674.00 1096.00
3081        SE  1076.0 1077.00 1078.00 1079.00 1080.00 1081.00 1082.00 1083.00
3082        ST
            *

3083        KK  D7579BROUTE
3084        KM        Cross-section: Estimated 3' deep, width and side slopes based on
3085        KM        aerial & topo / Manning's N Value: natural desert wash w/ heavy vegetati
3086        RS       4    FLOW
3087        RC   0.030   0.025   0.030    4196  0.0029    0.00
3088        RX  1000.0 1050.00 1070.00 1090.00 1090.00 1220.00 1230.00 1270.00
3089        RY  1083.0 1082.00 1078.00 1076.00 1076.00 1078.00 1080.00 1083.00
            *

3090        KK    D79BBASIN
3091        KM        BASIN BOUNDARY FROM THE GLENDALE SALT DEVELOPMENT
3092        KM        1990 TOPO AND DYSART DRAIN
3093        BA   0.317
3094        LG    0.35    0.35    4.65    0.32       0
3095        UI       0      76     302     500     546     404     243     149      95      55
3096        UI      38      14      14      15       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3097          UI       0       0       0       0       0       0       0       0       0       0
3098          UI       0       0       0       0       0       0       0       0       0       0
3099          UI       0       0       0       0       0       0       0       0       0       0
              *

3100          KK  CPD79BCOMBINE
3101          HC       3  34.441
              *

3102          KK  D79B80ROUTE
3103          KM        Dysart Drain
3104          KM        As Built Plans FCD No 94-38, May 1995
3105          KM        Manning's N Value: concrete channel
3106          RS       1   FLOW
3107          RC   0.013   0.013   0.013    1044  0.0009    0.00
3108          RX  100.00  109.30  117.30  125.30  135.30  143.30  151.30  160.70
3109          RY  1064.5 1059.80 1055.80 1051.80 1051.70 1055.80 1059.80 1064.50
              *

3110          KK     D80BASIN
3111          KM        BASIN BOUNDARY FROM 1990 TOPO AND DYSART DRAIN
3112          BA   0.131
3113          LG    0.29    0.32    4.45    0.41      13
3114          UI       0      86     307     317     162      79      34      15       9       0
3115          UI       0       0       0       0       0       0       0       0       0       0
3116          UI       0       0       0       0       0       0       0       0       0       0
3117          UI       0       0       0       0       0       0       0       0       0       0
3118          UI       0       0       0       0       0       0       0       0       0       0
              *

3119          KK   CPD80COMBINE
3120          HC       2  34.572
              *

3121          KK     B01BASIN
3122          KM        BASIN BOUNDARY FROM AMERICAN SAND AND ROCK INC
3123          KM        EL MIRAGE ROAD LLC, DYSART DRAIN AND AGUA FRIA RIVER
3124          BA   0.096
3125          LG    0.14    0.25    4.35    0.53      49
3126          UI       0     137     387     176      34       0       0       0       0       0
3127          UI       0       0       0       0       0       0       0       0       0       0
3128          UI       0       0       0       0       0       0       0       0       0       0
3129          UI       0       0       0       0       0       0       0       0       0       0
3130          UI       0       0       0       0       0       0       0       0       0       0
              *

3131          KK   DUMMYCOMBINE
3132          HC       3
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3133          KK     B03BASIN
3134          KM        BASIN BOUNDARY FROM GLENDALE SALT DEVELOPMENT
3135          KM        1990 TOPO AND DYSART DRAIN
3136          BA   0.338
3137          LG    0.40    0.30    4.70    0.39       4
3138          UI       0      32      58     130     171     211     266     383     344     264
3139          UI     215     171     127      70      54      38      31      10      10       9
3140          UI      10      10       0       0       0       0       0       0       0       0
3141          UI       0       0       0       0       0       0       0       0       0       0
3142          UI       0       0       0       0       0       0       0       0       0       0
              *

3143          KK  B03B05ROUTE
3144          KM        Cross section estimated from topo
3145          RS       2    FLOW
3146          RC   0.035   0.035   0.035    2746  0.0080    0.00
3147          RX  100.00  135.00  175.00  190.00  210.00  235.00  260.00  300.00
3148          RY  1074.0 1073.00 1072.00 1071.00 1070.00 1068.00 1069.00 1071.00
              *

3149          KK     B05BASIN
3150          KM        BASIN BOUNDARY FROM DYSART DRAIN, GLENDALE SALT DEVELOPMENT
3151          KM        AND 1990 TOPO
3152          BA   0.395
3153          LG    0.30    0.32    4.65    0.35      13
3154          UI       0      77     305     536     634     542     346     225     145      92
3155          UI      58      41      16      17      16       0       0       0       0       0
3156          UI       0       0       0       0       0       0       0       0       0       0
3157          UI       0       0       0       0       0       0       0       0       0       0
3158          UI       0       0       0       0       0       0       0       0       0       0
              *

3159          KK   CPB05COMBINE
3160          HC       2   0.733
              *

3161          KK  B05B06ROUTE
3162          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
3163          KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
3164          RS       3    FLOW
3165          RC   0.032   0.032   0.032    4011  0.0040    0.00
3166          RX  100.00  150.00  167.00  179.00  214.00  226.00  255.00  277.00
3167          RY  1039.0 1038.50 1038.00 1035.00 1035.10 1038.00 1038.25 1038.50
              *

3168          KK     B06BASIN
3169          KM        BASIN BOUNDARY ROCK QUARRY AND AGUA FRIA RIVER
3170          BA   0.400
3171          LG    0.22    0.28    3.92    0.41      34
3172          UI       0     132     523     797     695     415     234     134      75      41
3173          UI      21      21       0       0       0       0       0       0       0       0
3174          UI       0       0       0       0       0       0       0       0       0       0
3175          UI       0       0       0       0       0       0       0       0       0       0
3176          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3177          KK   CPB06COMBINE
3178          HC       2   1.133
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KK  B06B15ROUTE
KM        Cross-section: Estimated 4:1 side slopes, width based on
KM        aerial / Manning's N Value: clean earth; straight
RS       6    FLOW
RC   0.022   0.022   0.022    6376  0.0025    0.00
RX  100.00  101.00  222.00  238.00  250.00  264.00  283.00  284.00
RY  1033.0 1032.25 1032.00 1030.00 1030.10 1032.00 1032.25 1033.00
*

KK     B07BASIN
KM        BASIN BOUNDARY FROM LUKE AFT ESTATES, DESERT GARDENS IV
KM        AND LAFB BOUNDARY
BA   0.246
LG    0.33    0.34    4.90    0.30       8
UI       0      46     175     260     428     402     264     168      74      45
UI      16      12      13       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DB07REDIVERT
KM        Preliminary Drainage Report for Luke Ranch
KM        Remaining retention volume estimated from aerial
DT    RB07     7.7     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK  B07B09ROUTE
KM        Cross-section: Estimated 4' deep and 6:1 side slopes, width based
KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
RS       4    FLOW
RC   0.032   0.032   0.032    3559  0.0020    0.00
RX  100.00  106.00  112.00  136.00  160.00  184.00  194.00  204.00
RY  1070.0 1069.50 1069.00 1065.00 1065.10 1069.00 1069.50 1070.00
*

KK     B08BASIN
KM        BASIN BOUNDARY FROM LAFB BOUNDARY, 1990 TOPO
KM        MOBILE HOME PARK AND DREAMING SUMMIT DEVELOPMENT
BA   0.231
LG    0.35    0.35    4.70    0.31       1
UI       0     279     785     458     171      63      21       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  B08B09ROUTE
KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
KM        aerial & topo / Manning's N Value: grass sides, concrete bottom
RS       1    FLOW
RC   0.025   0.016   0.025    3184  0.0016    0.00
RX  100.00  107.00  114.00  118.00  133.00  137.00  157.00  167.00
RY  1070.0 1069.50 1069.00 1067.00 1067.10 1069.00 1069.50 1070.00
*

KK     B09BASIN
KM        BASIN BOUNDARY FROM DREAMING SUMMIT MULTI PHASE
BA   0.430
LG    0.24    0.25    5.00    0.33      33
UI       0     266     787    1245     677     235      73      36       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DB09REDIVERT
KM        Final Drainage Report for Dreaming Summit
KM        Unit 1 (75% retention used), Final Drainage Report
KM        Dreaming Summit Unit 2A
DT    RB09    20.0     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPB09COMBINE
HC       3   0.907
*

KK   SRB11STORAGE
KM        Litchfield Park Detention Facility, Infrastructure from
KM        Dreaming Summit Master Drainage Report
KO
RS       1    STOR
SV            2.24   11.46   25.91   43.25   61.13   79.80   98.97  119.35  140.75
SQ            5.00   18.00   37.00   58.00   79.00   92.00  104.00  115.00  125.00
SE  1058.0 1059.00 1060.00 1061.00 1062.00 1063.00 1064.00 1065.00 1066.00 1067.00
ST
*

KK  B09B11ROUTE
KM        Cross-section: Estimated 3' deep; side slopes and width based on
KM        aerial and topo / Manning's N Value: semi-natural wash w/ vegetation
RS       8    FLOW
RC   0.035   0.035   0.035    5810  0.0022    0.00
RX  100.00  107.00  112.00  118.00  130.00  137.00  143.00  154.00
RY  1058.0 1057.00 1056.00 1055.50 1055.00 1056.00 1058.00 1060.00
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     B10BASIN
KM        BASIN BOUNDARY FROM 1990 TOPO, DREAMING SUMMIT AND FALCON PLAZA
BA   0.162
LG    0.33    0.34    4.50    0.37       3
UI       0     164     494     357     144      59      21      14       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
```

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3267          UI       0       0       0       0       0       0       0       0       0       0
3268          UI       0       0       0       0       0       0       0       0       0       0
              *

3269          KK  B1011AROUTE
3270          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3271          KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
3272          RS       2    FLOW
3273          RC   0.022   0.022   0.022    3609  0.0060    0.00
3274          RX  100.00  107.50  119.50  125.50  129.00  135.00  147.00  154.50
3275          RY  1056.6 1055.30 1053.30 1052.30 1051.90 1053.30 1055.30 1056.60
              *

3276          KK  B1011BROUTE
3277          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3278          KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
3279          RS       2    FLOW
3280          RC   0.022   0.022   0.022    2760  0.0017    0.00
3281          RX  100.00  103.90  115.90  127.90  172.90  184.90  196.90  200.80
3282          RY  1051.9 1051.20 1049.20 1047.20 1046.80 1049.20 1051.20 1051.90
              *

3283          KK     B11BASIN
3284          KM        BASIN BOUNDARY FROM DREAMING SUMMIT, FALCON PLAZA AND COLTER CHANNEL
3285          BA   0.821
3286          LG    0.25    0.25    4.80    0.35      26
3287          UI       0     171     628     939    1568    1272     848     470     227     118
3288          UI      43      44       0       0       0       0       0       0       0       0
3289          UI       0       0       0       0       0       0       0       0       0       0
3290          UI       0       0       0       0       0       0       0       0       0       0
3291          UI       0       0       0       0       0       0       0       0       0       0
              *

3292          KK  DB11REDIVERT
3293          KM        Final Drainage Report for Dreaming Summit
3294          KM        Unit 1 Retention Basin 1
3295          KM        Dreaming Summit Unit 2B Retention Basin for Commercial Site
3296          DT    RB11     5.1     0.0
3297          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3298          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3299          KK   CPB11COMBINE
3300          HC       3    1.89
              *

3301          KK  B11B12ROUTE
3302          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3303          KM        August 1993, From Dysart Rd to Wigwam Creek Rd-74+00
3304          RS       2    FLOW
3305          RC   0.022   0.022   0.022    3516  0.0017    0.00
3306          RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
3307          RY  1046.0 1044.30 1042.30 1040.30 1039.90 1042.30 1044.30 1046.00
              *

3308          KK     B12BASIN
3309          KM        BASIN BOUNDARY FROM LOC CERROS, LITCHFILED VISTA VIEWS MULTI PHASE
3310          KM        WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
3311          BA   0.381
3312          LG    0.28    0.24    4.45    0.44      17
3313          UI       0      52     176     279     378     605     491     364     263     139
3314          UI      86      51      21      15      16       0       0       0       0       0
3315          UI       0       0       0       0       0       0       0       0       0       0
3316          UI       0       0       0       0       0       0       0       0       0       0
3317          UI       0       0       0       0       0       0       0       0       0       0
              *

3318          KK  DB12REDIVERT
3319          KM        Retention volume estimated based on aerial
3320          DT    RB12     1.8     0.0
3321          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3322          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3323          KK   CPB12COMBINE
3324          HC       2   2.271
              *

3325          KK  B12B14ROUTE
3326          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3327          KM        August 1993, From Wigwam Creek Rd to El Mirage-99+00
3328          RS       1    FLOW
3329          RC   0.022   0.022   0.022    1682  0.0021    0.00
3330          RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
3331          RY  1036.6 1034.90 1032.90 1030.90 1030.50 1032.90 1034.90 1036.60
              *

3332          KK     B13BASIN
3333          KM        BASIN BOUNDARY FROM WIGWAM CREEK PH 2, DYSART VILLAGE
3334          KM        BETHANY ESTATES NORTH AND 1990 TOPO
3335          BA   0.489
3336          LG    0.33    0.32    4.60    0.34       4
3337          UI       0     117     407     623    1006     732     468     216     114      47
3338          UI      27      27       0       0       0       0       0       0       0       0
3339          UI       0       0       0       0       0       0       0       0       0       0
3340          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 85

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

3341          UI       0       0       0       0       0       0       0       0       0       0
              *

3342          KK  B13B14ROUTE
3343          KM        Cross-section: Estimated 4' deep and 4:1 side slopes
3344          KM        width based on aerial / Manning's N Value: grass
3345          RS       2    FLOW
3346          RC   0.025   0.025   0.025    4696  0.0030    0.00
3347          RX  100.00  108.00  116.00  136.00  166.00  186.00  196.00  206.00
3348          RY  1040.0 1039.50 1039.00 1035.00 1035.10 1039.00 1039.50 1040.00
              *

3349          KK     B14BASIN
3350          KM        BASIN BOUNDARY FROM WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
3351          BA   0.328
3352          LG    0.25    0.25    4.60    0.39      33
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3353          UI       0      69     251     374     627     508     338     189      90      47
3354          UI      17      18       0       0       0       0       0       0       0       0
3355          UI       0       0       0       0       0       0       0       0       0       0
3356          UI       0       0       0       0       0       0       0       0       0       0
3357          UI       0       0       0       0       0       0       0       0       0       0
              *

3358          KK  DB14REDIVERT
3359          KM        Final Drainage Report for Wigwam Creek Ph. 1
3360          KM        (60% retention used), Remaining retention volume
3361          KM        estimated from aerial
3362          DT    RB14    23.9     0.0
3363          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3364          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3365          KK   CPB14COMBINE
3366          HC       3   3.088
              *

3367          KK  B14B15ROUTE
3368          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3369          KM        August 1993, From El Mirage to AFR-99+00
3370          RS       1    FLOW
3371          RC   0.022   0.022   0.022    2696  0.0016    0.00
3372          RX  100.00  112.00  118.00  124.00  238.00  244.00  250.00  262.00
3373          RY  1027.0 1025.00 1024.00 1023.00 1022.90 1024.00 1025.00 1027.00
              *

3374          KK     B15BASIN
3375          KM        BASIN BOUNDARY FROM ROCK QUARRY, COLTER CHANNEL AND AGUA FRIA RIVER
3376          BA   0.376
3377          LG    0.14    0.24    4.45    0.49      52
3378          UI       0      83     320     554     630     496     311     195     125      77
3379          UI      47      26      17      16       0       0       0       0       0       0
3380          UI       0       0       0       0       0       0       0       0       0       0
3381          UI       0       0       0       0       0       0       0       0       0       0
3382          UI       0       0       0       0       0       0       0       0       0       0
              *
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3383          KK   CPB15COMBINE
3384          HC       3   4.597
              *

3385          KK     B16BASIN
3386          KM        BASIN BOUNDARY FROM SUN HEALTH PROPERTIES AND 1990 TOPO
3387          BA   0.113
3388          LG    0.17    0.28    4.25    0.55      29
3389          UI       0     115     369     280      84      19       0       0       0       0
3390          UI       0       0       0       0       0       0       0       0       0       0
3391          UI       0       0       0       0       0       0       0       0       0       0
3392          UI       0       0       0       0       0       0       0       0       0       0
3393          UI       0       0       0       0       0       0       0       0       0       0
              *

3394          KK  DB16REDIVERT
3395          KM        Retention volume estimated based on aerial
3396          DT    RB16     3.6     0.0
3397          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3398          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3399          KK  B16B17ROUTE
3400          KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
3401          KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 65+00
3402          RS       1    FLOW
3403          RC   0.013   0.013   0.013    5250  0.0015    0.00
3404          RX  100.00  102.00  106.00  110.00  115.00  119.00  123.00  125.00
3405          RY  1038.3 1037.30 1035.30 1033.30 1033.20 1035.30 1037.30 1038.30
              *

3406          KK     B17BASIN
3407          KM        BASIN BOUNDARY FROM VERANDA MULTI PHASE, DYSART COMMONS
3408          KM        CAMBELBACK PLACE AT DYSART AND COLTER CHANNEL
3409          BA   0.334
3410          LG    0.22    0.28    4.80    0.36      30
3411          UI       0      81     285     436     698     494     312     138      77      28
3412          UI      19       0       0       0       0       0       0       0       0       0
3413          UI       0       0       0       0       0       0       0       0       0       0
3414          UI       0       0       0       0       0       0       0       0       0       0
3415          UI       0       0       0       0       0       0       0       0       0       0
              *

3416          KK  DB17REDIVERT
3417          KM        Retention volume estimated based on aerial
3418          DT    RB17     9.6     0.0
3419          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3420          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE 87

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

3421          KK   CPB17COMBINE
3422          HC       2   0.447
              *

3423          KK  B17B18ROUTE
3424          KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
3425          KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 115+00
3426          RS       1    FLOW
3427          RC   0.013   0.013   0.013    5176  0.0032    0.00
3428          RX  100.00  102.00  106.00  110.00  115.00  119.00  123.00  125.00
3429          RY  1028.4 1027.40 1025.40 1023.40 1023.30 1025.40 1027.40 1028.40
              *

3430          KK     B18BASIN
3431          KM        BASIN BOUNDARY FROM CAMELBACK CROSSING, TIERRA BUENA
3432          KM        WIGWAM CREEK AND COLTER CHANNEL
3433          BA   0.282
3434          LG    0.35    0.27    4.55    0.44      14
3435          UI       0      26      42     101     133     162     199     282     303     227
3436          UI     189     151     119      79      45      40      26      19       8       8
3437          UI       8       7       8       0       0       0       0       0       0       0
3438          UI       0       0       0       0       0       0       0       0       0       0
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3439          UI       0       0       0       0       0       0       0       0       0       0
              *

3440          KK  DB18REDIVERT
3441          KM        Final Drainage Report for Wigwam Creek Ph. 1 (40% retention used)
3442          DT    RB18      3.8     0.0
3443          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3444          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3445          KK   CPB18COMBINE
3446          HC       2   0.729
              *

3447          KK  B18B19ROUTE
3448          KM        Cross-section: Cross-section determined from aerial and
3449          KM        1990 topo / Manning's N Value: earth w/ sparse trees and brush
3450          RS       2    FLOW
3451          RC   0.032   0.032   0.032    3218  0.0053    0.00
3452          RX  100.00  104.00  108.00  124.00  142.00  157.00  179.00  193.00
3453          RY  1026.0 1026.00 1022.00 1020.00 1020.00 1022.00 1022.00 1022.10
              *

3454          KK     B19BASIN
3455          KM        BASIN BOUNDARY FROM ROCK QUARY, COLTER CHANNEL AND AGUA FRIA RIVER
3456          BA   0.117
3457          LG    0.15    0.25    4.40    0.51      55
3458          UI       0     163     426     208      74      22      12       0       0       0
3459          UI       0       0       0       0       0       0       0       0       0       0
3460          UI       0       0       0       0       0       0       0       0       0       0
3461          UI       0       0       0       0       0       0       0       0       0       0
3462          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3463          KK   CPB19COMBINE
3464          HC       2   0.846
              *

3465          KK     B20BASIN
3466          KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
3467          BA   0.228
3468          LG    0.15    0.25    4.15    0.59      55
3469          UI       0     159     547     550     276     131      57      23      17       0
3470          UI       0       0       0       0       0       0       0       0       0       0
3471          UI       0       0       0       0       0       0       0       0       0       0
3472          UI       0       0       0       0       0       0       0       0       0       0
3473          UI       0       0       0       0       0       0       0       0       0       0
              *

3474          KK   DUMMYCOMBINE
3475          HC       4
              *

3476          KK     B21BASIN
3477          KM        BASIN BOUNDARY FROM RIO CROSSING AND WIGWAM CREEK
3478          BA   0.243
3479          LG    0.29    0.29    4.20    0.48      21
3480          UI       0      44     172     255     420     396     264     166      75      45
3481          UI      17      13      12       0       0       0       0       0       0       0
3482          UI       0       0       0       0       0       0       0       0       0       0
3483          UI       0       0       0       0       0       0       0       0       0       0
3484          UI       0       0       0       0       0       0       0       0       0       0
              *

3485          KK  DB21REDIVERT
3486          KM        Final Drainage Report for Rio Crossing
3487          DT    RB21     12.3     0.0
3488          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3489          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3490          KK  B21B22ROUTE
3491          KM        Cross-section: Estimated channel, 2' depth, width based on
3492          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
3493          RS       1    FLOW
3494          RC   0.032   0.032   0.032    1942  0.0082    0.00
3495          RX  100.00  108.00  116.00  128.00  136.00  148.00  156.00  164.00
3496          RY  1010.0 1009.50 1009.00 1007.00 1007.10 1009.00 1009.50 1010.00
              *

3497          KK     B22BASIN
3498          KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
3499          BA   0.217
3500          LG    0.16    0.25    4.00    0.61      51
3501          UI       0     168     521     622     261      78      20       0       0       0
3502          UI       0       0       0       0       0       0       0       0       0       0
3503          UI       0       0       0       0       0       0       0       0       0       0
3504          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3505          UI       0       0       0       0       0       0       0       0       0       0
              *

3506          KK   CPB22COMBINE
3507          HC       2    0.46
              *

3508          KK     B23BASIN
3509          KM        BASIN BOUNDARY FROM WIGWAM CREEK
3510          BA   0.269
3511          LG    0.25    0.25    6.00    0.21      35
3512          UI       0      38     138     214     300     454     335     243     166      78
3513          UI      51      28      12      12      12       0       0       0       0       0
3514          UI       0       0       0       0       0       0       0       0       0       0
3515          UI       0       0       0       0       0       0       0       0       0       0
3516          UI       0       0       0       0       0       0       0       0       0       0
              *

3517          KK  DB23REDIVERT
3518          KM        Drainage Report for Wigwam Creek
3519          KM        South Offsites (50% area)
3520          DT    RB23      2.1     0.0
3521          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3522          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
```

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                 *
3523             KK  B23B24ROUTE
3524             KM        Cross-section: Assumed 2% cross slope from crown of road,
3525             KM        0.5' curb height / Manning's N Value: street and curb
3526             RS       1    FLOW
3527             RC   0.032   0.013   0.032    2557  0.0051    0.00
3528             RX  100.00  100.50  124.00  124.50  175.00  175.50  197.50  198.00
3529             RY  1025.0 1024.50 1024.00 1023.50 1023.40 1024.00 1024.50 1025.00
                 *

3530             KK     B24BASIN
3531             KM        BASIN BOUNDARY FROM CORTE SIERRA
3532             BA   0.188
3533             LG   0.24    0.25    4.20    0.53      37
3534             UI      0      73     233     422     371     215      82      35      13       0
3535             UI      0       0       0       0       0       0       0       0       0       0
3536             UI      0       0       0       0       0       0       0       0       0       0
3537             UI      0       0       0       0       0       0       0       0       0       0
3538             UI      0       0       0       0       0       0       0       0       0       0
                 *

3539             KK  DB24REDIVERT
3540             KM        Master Drainage and Grading Plans for Corte
3541             KM        Sierra Unit 1 and Unit 2 (50% area)
3542             DT    RB24    12.2     0.0
3543             DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3544             DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *
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3545             KK   CPB24COMBINE
3546             HC       2   0.457
                 *

3547             KK  B24B25ROUTE
3548             KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
3549             KM        based on aerial / Manning's N Value: earth w/ sparse trees and brush
3550             RS       3    FLOW
3551             RC   0.032   0.032   0.032    3303  0.0012    0.00
3552             RX  100.00  108.00  116.00  128.00  134.00  146.00  154.00  162.00
3553             RY  1011.5 1011.30 1011.00 1008.00 1008.10 1011.00 1013.50 1014.00
                 *

3554             KK     B25BASIN
3555             KM        BASIN BOUNDARY FROM 1990 TOPO
3556             BA   0.203
3557             LG   0.27    0.31    4.15    0.50      18
3558             UI      0      90     278     502     381     201      72      26      15       0
3559             UI      0       0       0       0       0       0       0       0       0       0
3560             UI      0       0       0       0       0       0       0       0       0       0
3561             UI      0       0       0       0       0       0       0       0       0       0
3562             UI      0       0       0       0       0       0       0       0       0       0
                 *

3563             KK   CPB25COMBINE
3564             HC       2   0.66
                 *

3565             KK     B26BASIN
3566             KM        BASIN BOUNDARY FROM CORTE SIERRA
3567             BA   0.308
3568             LG   0.23    0.24    4.50    0.43      38
3569             UI      0     114     363     649     627     368     149      69      21      21
3570             UI      0       0       0       0       0       0       0       0       0       0
3571             UI      0       0       0       0       0       0       0       0       0       0
3572             UI      0       0       0       0       0       0       0       0       0       0
3573             UI      0       0       0       0       0       0       0       0       0       0
                 *

3574             KK  DB26REDIVERT
3575             KM        Master Drainage and Grading Plans for Corte
3576             KM        Sierra Unit 1 and Unit 2 (50% area), Final Drainage
3577             KM        Report for Las Palmeras West
3578             DT    RB26    17.6     0.0
3579             DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3580             DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

3581             KK  B26B27ROUTE
3582             KM        Cross-section: Estimated 2' deep and 6:1 side slopes, width
3583             KM        based on aerial / Manning's N Value: clean earth; straight; ROB street
3584             RS       8    FLOW
3585             RC   0.032   0.022   0.013    2653  0.0008    0.00
3586             RX  100.00  101.00  340.00  352.00  356.00  368.00  378.00  388.00
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3587             RY  996.75  996.25  996.00  994.00  994.10  996.00  996.25  996.75
                 *

3588             KK     B27BASIN
3589             KM        BASIN BOUNDARY FROM CORTE SIERRA AND 1990 TOPO
3590             BA   0.363
3591             LG   0.15    0.25    4.50    0.48      54
3592             UI      0      78     281     422     705     563     369     197      98      48
3593             UI     19      20       0       0       0       0       0       0       0       0
3594             UI      0       0       0       0       0       0       0       0       0       0
3595             UI      0       0       0       0       0       0       0       0       0       0
3596             UI      0       0       0       0       0       0       0       0       0       0
                 *

3597             KK   CPB27COMBINE
3598             HC       2   0.671
                 *

3599             KK   DUMMYCOMBINE
3600             HC       4
                 *

3601             KK     B76BASIN
3602             KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
3603             BA   0.386
3604             LG   0.18    0.25    4.15    0.60      24
3605             UI      0      55     204     316     441     665     476     340     228     106
3606             UI     70      36      17      17      17       0       0       0       0       0
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3607          UI       0       0       0       0       0       0       0       0       0       0
3608          UI       0       0       0       0       0       0       0       0       0       0
3609          UI       0       0       0       0       0       0       0       0       0       0
              *

3610          KK  DB76REDIVERT
3611          KM        Retention volume estimated based on aerial
3612          DT    RB76    52.4     0.0
3613          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3614          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3615          KK  B7676AROUTE
3616          KM        Cross-section: Estimated based on aerial, street section
3617          KM        Manning's N Value: street, earth with sparse trees and shrubs
3618          RS       1    FLOW
3619          RC   0.032   0.016   0.032    3516  0.0057    0.00
3620          RX  100.00  110.00  120.00  122.00  158.00  160.00  170.00  180.00
3621          RY  1020.5 1020.30 1020.00 1019.50 1019.40 1019.90 1020.30 1020.50
              *

3622          KK     B75BASIN
3623          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
3624          BA   0.418
3625          LG    0.19    0.25    4.35    0.53      20
3626          UI       0     119     411     648     910     577     322     131      63      25
3627          UI      26       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3628          UI       0       0       0       0       0       0       0       0       0       0
3629          UI       0       0       0       0       0       0       0       0       0       0
3630          UI       0       0       0       0       0       0       0       0       0       0
              *

3631          KK  DB75REDIVERT
3632          KM        Master Drainage Study for Palm Valley (CONCEPT
3633          KM        DESIGN VOLUME OF 550 AC-FT RECOMMENDED)
3634          KM        Remaining retention volume estimated from aerial
3635          DT    RB75    52.3     0.0
3636          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3637          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3638          KK  B75A75ROUTE
3639          KM        Cross-section: Estimated based on aerial, street section
3640          KM        Manning's N Value: street, earth with sparse trees and shrubs
3641          RS       1    FLOW
3642          RC   0.025   0.025   0.025    5478  0.0026    0.00
3643          RX  100.00  107.00  114.00  114.10  155.00  155.10  165.00  171.00
3644          RY  1000.0  999.90  999.80  999.30  999.20  999.80  999.90 1000.00
              *

3645          KK    B75ABASIN
3646          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
3647          BA   0.281
3648          LG    0.23    0.23    6.20    0.20      26
3649          UI       0      57     207     315     516     446     295     173      81      44
3650          UI      15      14       0       0       0       0       0       0       0       0
3651          UI       0       0       0       0       0       0       0       0       0       0
3652          UI       0       0       0       0       0       0       0       0       0       0
3653          UI       0       0       0       0       0       0       0       0       0       0
              *

3654          KK  CPB75ACOMBINE
3655          HC       2   0.699
              *

3656          KK  B7576AROUTE
3657          KM        Cross-section: Estimated based on aerial, street section
3658          KM        Manning's N Value: street and ROW
3659          RS       1    FLOW
3660          RC   0.032   0.013   0.032    2062  0.0015    0.00
3661          RX  100.00  100.50  110.00  110.10  147.00  147.10  164.50  165.00
3662          RY  1000.9 1000.00  999.80  999.30  999.31  999.80 1000.00 1000.90
              *

3663          KK    B76ABASIN
3664          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
3665          BA   0.314
3666          LG    0.19    0.24    4.10    0.59      38
3667          UI       0     186     553     904     509     184      59      26       0       0
3668          UI       0       0       0       0       0       0       0       0       0       0
3669          UI       0       0       0       0       0       0       0       0       0       0
3670          UI       0       0       0       0       0       0       0       0       0       0
```



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

3671          UI       0       0       0       0       0       0       0       0       0       0
              *

3672          KK  CPB76ACOMBINE
3673          HC       3   1.399
              *

3674          KK  B76A78ROUTE
3675          KM        Cross-section: assumed 9' headwall to keep flow from
3676          KM        overflowing into canal, width from aerial / Manning's
3677          KM        N Value: concrete
3678          RS       1    FLOW
3679          RC   0.016   0.016   0.016     171  0.0117    0.00
3680          RX  100.00  101.00  102.00  103.00  163.00  164.00  165.00  166.00
3681          RY  1009.0 1008.90 1008.80 1000.00 1000.10 1008.80 1008.90 1009.00
              *

3682          KK     B77BASIN
3683          KM        WIGWAM CREEK
3684          BA   0.826
3685          LG    0.22    0.16    7.00    0.15      28
3686          UI       0     128     528     774    1202    1424     951     657     327     187
3687          UI     102      40      39       0       0       0       0       0       0       0
3688          UI       0       0       0       0       0       0       0       0       0       0
3689          UI       0       0       0       0       0       0       0       0       0       0
3690          UI       0       0       0       0       0       0       0       0       0       0
              *

3691          KK  DB77REDIVERT
3692          KM        Drainage Report for Wigwam Creek
```

```
KM        South Offsites (50% retention volume used)
DT    RB77     32.1      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK  B77B78ROUTE
KM        Cross-section: Estimated 3' deep, 1' fb, included wall, width based on
KM        aerial / Manning's N Value: earth with sparse trees and shrubs
RS        8    FLOW
RC   0.032   0.032   0.032    8404  0.0012    0.00
RX  100.00  110.00  134.00  154.00  170.00  190.00  200.00  200.50
RY  1001.0 1000.50 1000.00  996.00  996.10 1000.00 1001.00 1001.10
*

KK     B78BASIN
KM        DYSART RANCH
BA   0.570
LG    0.26     0.27     5.80     0.23       28
UI       0       41       41      127      180      221      253      300      374      506
UI     465      380      325      271      231      188      137       81       69       59
UI      42       37       13       12       13       12       13       13        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*
```



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

KK  DB78REDIVERT
KM        Final Drainage Report for Sage Creek
DT    RB78     11.6      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK  CPB78ACOMBINE
HC        2    1.396
*

KK  DB78BNDIVERT
KM        Est from RID Overchute Design Report for Basin #4
KM        based on overchute plans. 23ac-ft in Basin #4 shown on plans.
DT  RB78BN     18.4      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK  CPB78BCOMBINE
HC        2    2.795
*

KK  B78B79ROUTE
KM        Cross-section: golf course, assumed 0.5% side slopes,
KM        V-ditch / Manning's N Value: grass - golf course
RS        8    FLOW
RC   0.025   0.025   0.025    6489  0.0022    0.00
RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
*

KK     B79BASIN
KM        BASIN BOUNDARY FROM RID CANAL, FULTON ESTATES
KM        LITCHFIELD, AND PALM VALLEY PH 1
BA   0.848
LG    0.25     0.27     5.60     0.27       25
UI       0      109      347      579      760     1188     1160      848      619      413
UI     195      144       85       33       34       33        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  DB79REDIVERT
KM        Drainage Report for Fulton Estates
DT    RB79     14.9      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*
```



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

KK   CPB79COMBINE
HC        2    3.643
*

KK  B79B80ROUTE
KM        Cross-section: golf course, assumed 0.5% side slopes,
KM        V-ditch / Manning's N Value: grass - golf course
RS        1    FLOW
RC   0.025   0.025   0.025    1200  0.0033    0.00
RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
*

KK     B80BASIN
KM        PALM VALLEY PHASE 1
BA   0.266
LG    0.22     0.25     4.80     0.37       29
UI       0       46      185      271      439      440      295      191       86       53
UI      22       13       13        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  DB80REDIVERT
KM        Retention volume estimated based on aerial
DT    RB80     19.9      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK   CPB80COMBINE
HC        2    3.909
*
```

```
3775          KK   SRB80STORAGE
3776          KM        Storage at Palm Valley golf course cart path
3777          KO
3778          RS       1     STOR
3779          SV            6.61    16.70    34.00
3780          SQ          607.40 3236.62 7036.41
3781          SE  996.00  998.00 1000.00
3782          ST
              *

3783          KK  B80B81ROUTE
3784          KM        Cross-section: golf course, assumed 0.5% side slopes,
3785          KM        V-ditch / Manning's N Value: grass - golf course
3786          RS       4     FLOW
3787          RC   0.025   0.025   0.025    1746  0.0011    0.00
3788          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3789          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3790          KK     B81BASIN
3791          KM        PALM VALLEY PHASE 1
3792          BA   0.252
3793          LG    0.17    0.17    6.80    0.18      25
3794          UI       0      57     204     307     503     384     249     122      64      29
3795          UI      13      14       0       0       0       0       0       0       0       0
3796          UI       0       0       0       0       0       0       0       0       0       0
3797          UI       0       0       0       0       0       0       0       0       0       0
3798          UI       0       0       0       0       0       0       0       0       0       0
              *

3799          KK  DB81REDIVERT
3800          KM        Retention volume estimated based on aerial
3801          DT    RB81     1.8     0.0
3802          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3803          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3804          KK   CPB81COMBINE
3805          HC       2   4.161
              *

3806          KK   SRB81STORAGE
3807          KM        Storage at McDowell Road culvert
3808          KO
3809          RS       1     STOR
3810          SV            2.20     9.46    29.91
3811          SQ          114.77  324.61 2290.53
3812          SE  992.00  994.00  996.00  998.00
3813          ST
              *

3814          KK  B81B84ROUTE
3815          KM        Cross-section: Estimated from aerial, assumed 2' depth / Manning's
3816          KM        N Value: earth with sparse trees and shrubs (main channel),
3817          KM        clean earth (left and right bank)
3818          RS       1     FLOW
3819          RC   0.022   0.032   0.022    2092  0.0077    0.00
3820          RX  100.00  101.00  145.00  150.00  160.00  165.00  219.00  220.00
3821          RY  1000.2 1000.10  996.40  996.00  995.90  996.30 1000.10 1000.20
              *

3822          KK     B82BASIN
3823          KM        PALM VALLEY PHASE 1
3824          BA   0.149
3825          LG    0.19    0.25    5.30    0.31      29
3826          UI       0      38     132     202     313     219     134      58      32      11
3827          UI       8       0       0       0       0       0       0       0       0       0
3828          UI       0       0       0       0       0       0       0       0       0       0
3829          UI       0       0       0       0       0       0       0       0       0       0
3830          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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

3831          KK  DB82REDIVERT
3832          KM        Retention volume estimated based on aerial
3833          DT    RB82    11.1     0.0
3834          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3835          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3836          KK  B82B83ROUTE
3837          KM        Cross-section: cross-section estimated from aerial, est
3838          KM        1' deep / Manning's N Value: clean straight earth
3839          RS      21     FLOW
3840          RC   0.022   0.022   0.022    1687  0.0095    0.00
3841          RX  100.00  105.00  115.00  135.00  136.00  155.00  160.00  170.00
3842          RY  1000.2 1000.10 1000.00  999.00  999.10 1000.00 1000.10 1000.20
              *

3843          KK     B83BASIN
3844          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
3845          BA   0.223
3846          LG    0.20    0.31    6.00    0.22      51
3847          UI       0     219     702     564     181      42       0       0       0       0
3848          UI       0       0       0       0       0       0       0       0       0       0
3849          UI       0       0       0       0       0       0       0       0       0       0
3850          UI       0       0       0       0       0       0       0       0       0       0
3851          UI       0       0       0       0       0       0       0       0       0       0
              *

3852          KK  DB83REDIVERT
3853          KM        Retention volume estimated based on aerial
3854          DT    RB83     1.9     0.0
3855          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3856          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3857          KK   CPB83COMBINE
3858          HC       2   0.372
              *

3859          KK   SRB83STORAGE
3860          KM        ADOT Regional Basin (per URS 2001 study)
```

```
3861          KO
3862          RS       1    STOR
3863          SV            19.83   60.59  109.71  161.17  215.52  334.65  399.54  399.64  399.74
3864          SQ            36.00   44.00   52.00   60.00   65.00   76.00   81.00   86.00   87.00
3865          SE   970.50  974.00  976.00  978.00  980.00  982.00  986.00  988.00  990.00  990.50
3866          ST
              *

3867          KK  B83B84ROUTE
3868          KM        Cross-section: Cross-section determined from aerial and
3869          KM        1990 topo / Manning's N Value: clean straight earth
3870          RS       3    FLOW
3871          RC   0.022   0.022   0.022     680  0.0010    0.00
3872          RX  100.00  142.00  160.00  191.00  231.00  258.00  269.00  281.00
```



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

3873          RY  988.00  986.00  984.00  976.00  976.10  984.00  986.00  988.00
              *

3874          KK     B71BASIN
3875          KM        BASIN BOUNDARY FROM PALM VALLEY CONCEPT DRAINAGE PLAN
3876          KM        PV PHASE 3A AND 38, SUNRISE
3877          BA   0.959
3878          LG    0.24    0.26    4.50    0.43      34
3879          UI       0     108     268     508     654     865    1280    1081     828     633
3880          UI     466     246     179     112      68      32      33      33       0       0
3881          UI       0       0       0       0       0       0       0       0       0       0
3882          UI       0       0       0       0       0       0       0       0       0       0
3883          UI       0       0       0       0       0       0       0       0       0       0
              *

3884          KK  DB71REDIVERT
3885          KM        Palm Valley Concept Drainage Plan for the Roosevelt
3886          KM        Canal Watershed (conceptual retention required
3887          KM        volume used, no design plans available)
3888          DT    RB71    73.5     0.0
3889          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3890          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3891          KK  B71B72ROUTE
3892          KM        Cross-section: golf course, assumed 0.5% side slopes
3893          KM        V-ditch / Manning's N Value: grass/golf course
3894          RS      34    FLOW
3895          RC   0.025   0.025   0.025    8168  0.0022    0.00
3896          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3897          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3898          KK     B72BASIN
3899          KM        PALM VALLEY
3900          BA   1.120
3901          LG    0.22    0.26    4.90    0.38      22
3902          UI       0     108     209     460     595     741     951    1345    1096     858
3903          UI     689     544     368     198     173     109      72      33      34      33
3904          UI      33       0       0       0       0       0       0       0       0       0
3905          UI       0       0       0       0       0       0       0       0       0       0
3906          UI       0       0       0       0       0       0       0       0       0       0
              *

3907          KK  DB72REDIVERT
3908          KM        Retention volume estimated based on aerial
3909          DT    RB72    26.2     0.0
3910          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3911          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
```



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

3912          KK   CPB72COMBINE
3913          HC       2   2.079
              *

3914          KK  B72B74ROUTE
3915          KM        Cross-section: estimated from aerial, assumed 4' depth, 4:1
3916          KM        sideslopes / Manning's N Value: concrete channel
3917          RS       1    FLOW
3918          RC   0.016   0.016   0.016    2872  0.0045    0.00
3919          RX  100.00  107.00  114.00  138.00  150.00  174.00  184.00  194.00
3920          RY  1000.2 1000.10 1000.00  996.00  996.10 1000.00 1000.10 1000.10
              *

3921          KK     B73BASIN
3922          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
3923          BA   0.304
3924          LG    0.32    0.29    4.70    0.40      20
3925          UI       0      33      81     154     198     258     387     349     270     206
3926          UI     157      91      56      41      28      10      11      10      10       0
3927          UI       0       0       0       0       0       0       0       0       0       0
3928          UI       0       0       0       0       0       0       0       0       0       0
3929          UI       0       0       0       0       0       0       0       0       0       0
              *

3930          KK  DB73REDIVERT
3931          KM        Retention volume estimated based on aerial
3932          DT    RB73     6.1     0.0
3933          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3934          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3935          KK   SRB73STORAGE
3936          KM        ADOT Regional Basin (per URS 2001 study)
3937          KO
3938          RS       1    STOR
3939          SV            9.46   52.88  120.61  265.17  348.06  348.16  348.26
3940          SQ            7.00   55.00   55.00   55.00   55.00   55.00  329.00
3941          SE   975.70  978.00  980.00  982.00  986.00  988.00  988.80  990.00
3942          ST
              *

3943          KK  B73B74ROUTE
3944          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3945          KM        Manning's N Value: avg value for cultivated areas
3946          RS      14    FLOW
3947          RC   0.038   0.038   0.038    1446  0.0007    0.00
3948          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
```

```
3949          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3950          KK     B74BASIN
3951          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
3952          BA   0.106
3953          LG    0.16    0.27    4.80    0.40      66
3954          UI       0     104     334     268      86      20       0       0       0       0
3955          UI       0       0       0       0       0       0       0       0       0       0
3956          UI       0       0       0       0       0       0       0       0       0       0
3957          UI       0       0       0       0       0       0       0       0       0       0
3958          UI       0       0       0       0       0       0       0       0       0       0
              *

3959          KK  DB74REDIVERT
3960          KM        Retention volume estimated based on aerial
3961          DT    RB74     4.9     0.0
3962          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3963          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3964          KK   CPB74COMBINE
3965          HC       3   2.489
              *

3966          KK   SRB74STORAGE
3967          KM        ADOT Regional Basin (per URS 2001 study)
3968          KO
3969          RS       1    STOR
3970          SV           11.35   32.69   57.00  108.98  126.82  136.43
3971          SQ            2.00   60.00  263.00  668.00  800.00  953.00
3972          SE  974.60  978.00  980.00  982.00  986.00  987.30  988.00
3973          ST
              *

3974          KK  B74B84ROUTE
3975          KM        Cross-section: Cross-section determined from aerial and 1990
3976          KM        topo / Manning's N Value: channel w/ concrete sides
3977          RS       1    FLOW
3978          RC   0.016   0.022   0.016    2292  0.0050    0.00
3979          RX  100.00  120.00  140.00  160.00  182.00  202.00  212.00  222.00
3980          RY  986.20  986.10  986.00  976.00  976.10  986.00  986.10  983.20
              *

3981          KK     B84BASIN
3982          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
3983          BA   0.216
3984          LG    0.18    0.20    8.00    0.11      48
3985          UI       0      87     273     496     423     241      89      36      15       0
3986          UI       0       0       0       0       0       0       0       0       0       0
3987          UI       0       0       0       0       0       0       0       0       0       0
3988          UI       0       0       0       0       0       0       0       0       0       0
3989          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3990          KK  DB84REDIVERT
3991          KM        Retention volume estimated based on aerial
3992          DT    RB84     1.6     0.0
3993          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3994          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3995          KK   CPB84COMBINE
3996          HC       4   7.238
              *

3997          KK   SRB84STORAGE
3998          KM        ADOT Regional Basin (per URS 2001 study)
3999          KM        Drains to River via underground storm drain system
4000          KO
4001          RS       1    STOR
4002          SV           25.10   71.68  127.08  189.52  324.54  402.14  402.24  402.34
4003          SQ            6.00  233.00  460.00  460.00  460.00  460.00  460.00  657.00
4004          SE  972.50  976.00  978.00  980.00  982.00  986.00  988.00  988.60  990.00
4005          ST
              *

4006          KK     B28BASIN
4007          KM        BASIN BOUNDARY FROM RANCHO SANTA FE
4008          BA   0.960
4009          LG    0.23    0.25    4.55    0.42      36
4010          UI       0     116     330     579     759    1086    1374    1003     771     567
4011          UI     318     197     130      74      36      35      36       0       0       0
4012          UI       0       0       0       0       0       0       0       0       0       0
4013          UI       0       0       0       0       0       0       0       0       0       0
4014          UI       0       0       0       0       0       0       0       0       0       0
              *

4015          KK  DB28REDIVERT
4016          KM        Rancho Santa Fe Ph.1 Infrastructure Drainage Design Report
4017          DT    RB28     0.4     0.0
4018          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4019          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4020          KK     B29BASIN
4021          KM        BASIN BOUNDARY FROM PALMILLA APTS, RANCHO SANTA FE CENTER
4022          KM        PALMILLA CENTER
4023          BA   0.177
4024          LG    0.17    0.25    4.80    0.38      55
4025          UI       0      46     157     244     375     256     159      66      38      12
4026          UI      10       0       0       0       0       0       0       0       0       0
4027          UI       0       0       0       0       0       0       0       0       0       0
4028          UI       0       0       0       0       0       0       0       0       0       0
4029          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4030          KK  DB29REDIVERT
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4031          KM        Drainage Report for Palmilla Center, Final Drainage
4032          KM        Report for Rancho Santa Fe Center, Final Drainage
4033          KM        Report for Palmilla Apts, Drainage Report - Walmart
4034          DT    RB29     11.9      0.0
4035          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4036          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4037          KK     B30BASIN
4038          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
4039          BA   0.170
4040          LG    0.13     0.26     4.70     0.41       73
4041          UI       0       67      210      381      336      195       73       31       12        0
4042          UI       0        0        0        0        0        0        0        0        0        0
4043          UI       0        0        0        0        0        0        0        0        0        0
4044          UI       0        0        0        0        0        0        0        0        0        0
4045          UI       0        0        0        0        0        0        0        0        0        0
              *

4046          KK  DB30REDIVERT
4047          KM        Drainage Report for Avondale Home Depot, Master
4048          KM        Drainage Report for Coldwater Plaza, Remaining
4049          KM        retention volume estimated from aerial
4050          DT    RB30     10.8      0.0
4051          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4052          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4053          KK   SRB30STORAGE
4054          KM        Storage behind Agua Fria River levee (WLB)
4055          KO
4056          RS       1     STOR
4057          SV            1.16     7.44    17.82    22.15    60.86
4058          SQ           16.00    38.00    49.00   117.00  3687.00
4059          SE  972.00   974.00   976.00   977.60   978.00   980.00
4060          ST
              *

4061          KK     B31BASIN
4062          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
4063          BA   0.681
4064          LG    0.18     0.25     4.60     0.45       41
4065          UI       0      190      644     1012     1477      957      558      227      112       41
4066          UI      40        0        0        0        0        0        0        0        0        0
4067          UI       0        0        0        0        0        0        0        0        0        0
4068          UI       0        0        0        0        0        0        0        0        0        0
4069          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4070          KK  DB31REDIVERT
4071          KM        Preliminary Drainage Report for Rio Estrella Plaza
4072          KM        Drainage Report for Rio Estrella Commerce Park Drainage
4073          KM        System, Final Drainage Report for Parcel XIV at Arizona Traditions,
4074          KM        Remaining retention volume estimated from aerial
4075          DT    RB31     24.5      0.0
4076          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4077          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4078          KK   SRB31STORAGE
4079          KM        Storage behind Agua Fria River levee (WLB)
4080          KO
4081          RS       1     STOR
4082          SV            4.15    34.22    71.09   141.43   276.96   481.06   516.31   604.41   744.46
4083          SQ           16.00    50.00    71.00    87.00   100.00   112.00   114.00  1335.00 10496.00
4084          SE  956.00   958.00   960.00   962.00   964.00   966.00   968.00   968.30   969.00   970.00
4085          ST
              *

4086          KK   DUMMYCOMBINE
4087          HC       2
              *

4088          KK   DUMMYCOMBINE
4089          HC       5
              *

4090          KK     B32BASIN
4091          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR TRES
4092          KM        RIOS LANDING PARCELS 4 AND 5 DATED 2/13/03 BY CMX AND FINAL DRAINAGE
4093          KM        REPORT FOR THE VILLAGE AT TRES RIOS LANDING DATED 6/14/05 BY CMX
4094          BA   0.819
4095          LG    0.27     0.28     3.88     0.42       25
4096          UI       0       92      230      433      558      740     1093      922      707      541
4097          UI     398      211      153       95       57       28       28       29        0        0
4098          UI       0        0        0        0        0        0        0        0        0        0
4099          UI       0        0        0        0        0        0        0        0        0        0
4100          UI       0        0        0        0        0        0        0        0        0        0
              *

4101          KK  DB32REDIVERT
4102          KM        Final Drainage Report for Tres Rios Landing Parcels 4 & 5, Final
4103          KM        Drainage Report for The Village at Tres Rios Landing, Drainage
4104          KM        Report for Whyman Haciendas, Drainage Report for Litchfield
4105          KM        Mountain View Homes, Remaining retention volume estimated from aerial
4106          DT    RB32     25.3      0.0
4107          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4108          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4109          KK   SRB32STORAGE
4110          KM        Storage behind Lwr Buckeye Rd, est from topo
4111          KO
4112          RS       1     STOR
4113          SV            7.79    53.57   155.29   276.97
4114          SQ                          2206.00  6240.00
4115          SE  942.00   944.00   946.00   948.00   950.00
4116          ST
              *

4117          KK  B32B33ROUTE
4118          KM        Cross-section: Cross-section determined from 1990 topo
```

```
4119          KM        Manning's N Value: clean straight earth
4120          RS       1    FLOW
4121          RC   0.022   0.022   0.022    3134  0.0045    0.00
4122          RX  100.00  112.00  125.00  132.00  185.00  190.00  215.00  240.00
4123          RY  948.00  944.00  940.00  938.00  938.10  940.00  942.00  944.00
              *

4124          KK     B33BASIN
4125          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4126          BA   0.285
4127          LG    0.39    0.30    4.30    0.51       7
4128          UI       0      43     142     267     356     358     313     231     154     112
4129          UI      68      49      34      25      14       6       5       5       6       5
4130          UI       6       5       0       0       0       0       0       0       0       0
4131          UI       0       0       0       0       0       0       0       0       0       0
4132          UI       0       0       0       0       0       0       0       0       0       0
              *

4133          KK  DB33REDIVERT
4134          KM        Master Drainage Report for Lower Buckeye Park
4135          KM        Remaining retention volume estimated from aerial
4136          DT    RB33     4.8     0.0
4137          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4138          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4139          KK   CPB33COMBINE
4140          HC       2   1.104
              *

4141          KK     B34BASIN
4142          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4143          BA   0.125
4144          LG    0.20    0.27    4.25    0.52      33
4145          UI       0     199     533     196      32       0       0       0       0       0
4146          UI       0       0       0       0       0       0       0       0       0       0
4147          UI       0       0       0       0       0       0       0       0       0       0
4148          UI       0       0       0       0       0       0       0       0       0       0
4149          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4150          KK     B38BASIN
4151          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4152          BA   0.343
4153          LG    0.41    0.28    4.20    0.57       5
4154          UI       0      34      53     125     194     249     290     288     260     260
4155          UI     182     169     118     103      71      54      42      33      29      20
4156          UI      19      12       4       5       4       4       5       4       4       5
4157          UI       4       4       5       0       0       0       0       0       0       0
4158          UI       0       0       0       0       0       0       0       0       0       0
              *

4159          KK  DB38REDIVERT
4160          KM        Retention volume estimated based on aerial
4161          DT    RB38     0.8     0.0
4162          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4163          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4164          KK  B38B39ROUTE
4165          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4166          KM        Manning's N Value: avg value for cultivated areas
4167          RS      12    FLOW
4168          RC   0.038   0.038   0.038    4543  0.0018    0.00
4169          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4170          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4171          KK     B37BASIN
4172          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4173          BA   0.466
4174          LG    0.50    0.25    3.92    0.41       0
4175          UI       0      25      26      29      52      82     130     150     150     193
4176          UI     199     214     211     211     201     176     186     181     131     142
4177          UI     125      95      86      73      76      61      48      41      37      31
4178          UI      31      23      23      23      15      15      14      14      15       5
4179          UI       3       3       3       3       3       4       3       3       3       3
              *

4180          KK  B37B39ROUTE
4181          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4182          KM        Manning's N Value: avg value for cultivated areas
4183          RS      12    FLOW
4184          RC   0.038   0.038   0.038    5801  0.0031    0.00
4185          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4186          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4187          KK     B39BASIN
4188          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4189          KM        FLOW ENTERS BUCKEYE CANAL
4190          BA   0.775
4191          LG    0.50    0.25    4.70    0.47       0
4192          UI       0      36      37      36      65      84     141     192     222     205
4193          UI     293     260     308     305     308     307     288     259     252     281
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4194          UI     225     189     213     173     139     131     109     102     117      72
4195          UI      66      59      57      45      44      40      33      34      33      22
4196          UI      20      21      21      20      19       4       5       4       5       4
              *

4197          KK   CPB39COMBINE
4198          HC       3   1.584
              *

4199          KK   SRB39STORAGE
4200          KM        Storage behind canal (WLB)
4201          KO
4202          RS       1    STOR
4203          SV            1.84    7.82   26.86  173.63
4204          SQ                          247.00 6031.00
4205          SE  914.00  916.00  916.90  918.00  920.00
4206          ST
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*

KK     B35BASIN
KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
BA   0.144
LG    0.04    0.09    3.25    0.65      18
UI       0      79     291     325     217     104      48      26       8       5
UI       5       5       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK     B36BASIN
KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
BA   0.056
LG    0.03    0.02    4.55    0.30       0
UI       0     113     215      76      21       4       4       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK   DUMMYCOMBINE
HC       4
*

KK   DUMMYCOMBINE
HC       3
*
```



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

KK     B40BASIN
KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
KM        PHOTOGRAPHY OF AG LAND, 1990 TOPO, SWAN HILL NURSERIES AND
KM        ORANGEWOOD NURSERIES
BA   0.514
LG    0.38    0.25    4.50    0.52      15
UI       0      40      41      86     172     231     271     310     338     334
UI     306     287     278     212     205     151     118     123      75      65
UI      55      47      37      36      24      22      23      16       5       5
UI       5       5       5       5       5       5       5       4       5       5
UI       5       5       5       0       0       0       0       0       0       0
*

KK   DD681RETRIEVE
DR  DD681S
*

KK  D68B40ROUTE
KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
KM        aerial & topo / Manning's N Value: clean straight earth; street LOB
RS       3    FLOW
RC   0.016   0.022   0.022    5311  0.0047    0.00
RX  100.00  112.00  124.00  132.00  135.00  143.00  155.00  167.00
RY  1110.5 1110.30 1110.00 1108.00 1108.10 1110.00 1110.30 1110.50
*

KK   CPB40COMBINE
HC       2   0.766
*

KK   DB401DIVERT
KM        Glendale at Sarival split flow
DT  DB401S      0.0     0.0
DI     0.0    68.5   415.8  1670.6  4103.5     0.0     0.0     0.0     0.0     0.0
DQ     0.0    37.6   246.0  1114.3  2520.9     0.0     0.0     0.0     0.0     0.0
*

KK   DB402DIVERT
KM        Glendale at Sarival split flow
DT  DB402S      0.0     0.0
DI     0.0    30.9   169.8   556.4  1582.5     0.0     0.0     0.0     0.0     0.0
DQ     0.0    14.8    64.4   133.4   217.4     0.0     0.0     0.0     0.0     0.0
*

KK  B40B41ROUTE
KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
KM        on aerial & topo / Manning's N Value: clean straight earth
RS       4    FLOW
RC   0.022   0.022   0.013    5216  0.0033    0.00
RX  100.00  100.50  228.00  234.00  238.00  244.00  252.00  260.00
RY  1088.6 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1088.60
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     B41BASIN
KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
KM        OF MARICOPA COUNTY HOMES AND 1990 TOPO
BA   0.952
LG    0.38    0.25    4.65    0.39       5
UI       0      51      53      69     177     223     259     293     325     372
UI     424     547     653     593     509     440     400     347     306     263
UI     232     173     119      93      85      79      53      51      41      16
UI      16      15      16      16      16      16      16       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK   DD682RETRIEVE
DR  DD682S
*

KK  D68B41ROUTE
KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
KM        aerial & topo / Manning's N Value: earth with sparse trees and shrubs
RS      17    FLOW
RC   0.032   0.032   0.032   10073  0.0042    0.00
RX  100.00  124.00  130.00  136.00  141.00  147.00  153.00  162.00
RY  1120.1 1120.00 1118.50 1117.00 1117.10 1118.50 1120.00 1120.10
*
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4289          KK   DD691RETRIEVE
4290          DR  DD691S
              *

4291          KK  D69B41ROUTE
4292          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4293          KM        on aerial & topo / Manning's N Value: clean straight earth
4294          RS       7    FLOW
4295          RC   0.022   0.022   0.022    5281  0.0038    0.00
4296          RX  100.00  120.00  146.00  158.00  170.00  182.00  210.00  244.00
4297          RY  1086.2 1086.10 1086.00 1083.00 1082.90 1086.00 1086.10 1086.20
              *

4298          KK   CPB41COMBINE
4299          HC       4    2.18
              *

4300          KK  DB41SEDIVERT
4301          KM        Reems at Glendale split flow
4302          DT   DB41S     0.0     0.0
4303          DI     0.0   210.0  1330.5  3445.6  6340.8     0.0     0.0     0.0     0.0     0.0
4304          DQ     0.0   201.5  1259.5  3072.1  5469.4     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4305          KK  B41B43ROUTE
4306          KM        Cross-section: Cross section estimated from aerial and topo
4307          KM        Manning's N Value: clean straight earth
4308          RS       2    FLOW
4309          RC   0.022   0.022   0.022    1849  0.0022    0.00
4310          RX  100.00  104.00  108.00  114.00  116.00  122.00  125.00  128.00
4311          RY  1082.0 1081.80 1081.50 1080.00 1080.10 1081.50 1081.80 1082.00
              *

4312          KK     B43BASIN
4313          KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
4314          BA   0.541
4315          LG    0.49    0.25    4.70    0.46       1
4316          UI       0      18      19      18      19      27      39      45      64      95
4317          UI     103     112      95     123     157     123     154     156     154     153
4318          UI     156     153     148     128     129     128     143     134      96      96
4319          UI     103     108      77      71      69      60      54      52      56      56
4320          UI      35      36      31      29      30      23      22      23      22      16
              *

4321          KK   DD692RETRIEVE
4322          DR  DD692S
              *

4323          KK  D69B43ROUTE
4324          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4325          KM        Manning's N Value: avg value for cultivated areas
4326          RS      50    FLOW
4327          RC   0.038   0.038   0.038    9199  0.0027    0.00
4328          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4329          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4330          KK   CPB43COMBINE
4331          HC       3   2.721
              *

4332          KK  B43B45ROUTE
4333          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
4334          KM        aerial & topo / Manning's N Value: clean straight earth
4335          RS       5    FLOW
4336          RC   0.022   0.022   0.022    4681  0.0004    0.00
4337          RX  100.00  112.00  124.00  132.00  138.00  146.00  166.00  186.00
4338          RY  1080.5 1080.30 1080.00 1076.00 1076.10 1080.00 1080.30 1080.50
              *

4339          KK     B44BASIN
4340          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
4341          KM        PHOTOGRAPHY OF AG LAND AND1990 TOPO
4342          BA   0.525
4343          LG    0.47    0.25    4.25    0.61       4
4344          UI       0      33      34      55      89     160     196     207     259     278
4345          UI     281     285     259     233     253     199     183     169     127     107
4346          UI      96      95      63      54      47      42      36      30      30      20
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4347          UI      19      19      19      10       4       4       4       5       4       4
4348          UI       4       4       5       4       4       4       5       4       4       4
              *

4349          KK   DB401RETRIEVE
4350          DR  DB401S
              *

4351          KK  B40B44ROUTE
4352          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
4353          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
4354          KM        street LOB
4355          RS      12    FLOW
4356          RC   0.013   0.032   0.038    5333  0.0037    0.00
4357          RX  100.00  112.00  128.00  136.00  138.00  146.00  449.00  450.00
4358          RY  1084.8 1084.50 1084.00 1082.00 1082.10 1084.00 1084.40 1084.80
              *

4359          KK   CPB44COMBINE
4360          HC       2   1.291
              *

4361          KK   DB441DIVERT
4362          KM        Bethany Home at Sarival split flow
4363          DT  DB441S     0.0     0.0
4364          DI     0.0  1083.7  2846.1  5566.3  9305.7     0.0     0.0     0.0     0.0     0.0
4365          DQ     0.0   133.1   579.6  1378.1  2728.9     0.0     0.0     0.0     0.0     0.0
              *

4366          KK   DB442DIVERT
4367          KM        Bethany Home at Sarival split flow
4368          DT  DB442S     0.0     0.0
4369          DI     0.0   950.6  2266.5  4188.3  6576.8     0.0     0.0     0.0     0.0     0.0
4370          DQ     0.0    83.1   145.7   219.1   301.9     0.0     0.0     0.0     0.0     0.0
```

```
                *
4371            KK  B44B45ROUTE
4372            KM        Cross-section: Estimated 4' deep, width and side slopes based on
4373            KM        aerial & topo / Manning's N Value: clean straight earth, street ROB
4374            RS       2    FLOW
4375            RC   0.022   0.022   0.016    2127  0.0019    0.00
4376            RX  100.00  120.00  140.00  152.00  192.00  204.00  224.00  236.00
4377            RY  1078.5 1078.30 1078.00 1074.00 1074.10 1078.00 1078.30 1078.50
                *

4378            KK     B45BASIN
4379            KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
4380            BA   0.805
4381            LG    0.43    0.25    4.70    0.43       5
4382            UI       0      44      44      50      91     141     228     261     259     334
4383            UI     349     370     366     366     343     306     324     307     230     248
4384            UI     207     167     148     127     132     101      81      71      63      55
4385            UI      52      40      40      40      25      24      25      25      24       6
4386            UI       6       5       6       5       6       5       6       5       6       5
                *
1                                          HEC-1 INPUT                                          PAGE111

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


4387            KK   DB402RETRIEVE
4388            DR  DB402S
                *

4389            KK  B40B45ROUTE
4390            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4391            KM        aerial & topo / Manning's N Value: clean straight earth
4392            RS       5    FLOW
4393            RC   0.022   0.022   0.022    6771  0.0037    0.00
4394            RX  100.00  120.00  140.00  152.00  153.00  165.00  175.00  185.00
4395            RY  1090.2 1090.10 1090.00 1087.00 1087.10 1090.00 1090.10 1090.20
                *

4396            KK  DB41SERETRIEVE
4397            DR   DB41S
                *

4398            KK  B41B45ROUTE
4399            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4400            KM        Manning's N Value: avg value for cultivated areas
4401            RS      17    FLOW
4402            RC   0.038   0.038   0.038    6479  0.0009    0.00
4403            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4404            RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
                *

4405            KK   CPB45COMBINE
4406            HC       5   4.051
                *

4407            KK  B45B47ROUTE
4408            KM        Cross-section:
4409            KM        Manning's N Value: avg value for cultivated areas
4410            RS       6    FLOW
4411            RC   0.038   0.038   0.038    5550  0.0043    0.00
4412            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4413            RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *

4414            KK     L01BASIN
4415            KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
4416            BA   0.162
4417            LG    0.26    0.26    5.20    0.29      33
4418            UI       0      64     203     370     316     184      68      28      12       0
4419            UI       0       0       0       0       0       0       0       0       0       0
4420            UI       0       0       0       0       0       0       0       0       0       0
4421            UI       0       0       0       0       0       0       0       0       0       0
4422            UI       0       0       0       0       0       0       0       0       0       0
                *
1                                          HEC-1 INPUT                                          PAGE112

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


4423            KK  DL01REDIVERT
4424            KM        Master Drainage Report for Del Webb's Grand Avenue Property
4425            DT    RL01     9.9     0.0
4426            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4427            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

4428            KK  L01L03ROUTE
4429            KM        Cross-section: From Arizona Traditions Report
4430            KM        Manning's N Value: Channel along Arizona Traditons
4431            KM        Manning's for earth with grass and forbs
4432            RS       5    FLOW
4433            RC   0.025   0.025   0.025    5547  0.0032    0.00
4434            RX  100.00  114.00  116.00  118.00  120.00  122.00  124.00  138.00
4435            RY  1000.0  995.40  995.30  995.20  995.10  995.20  995.30 1000.00
                *

4436            KK     L03BASIN
4437            KM        BASIN BOUNDARY FROM ARIZONA TRADITIONS NORTH AND SOUTH
4438            BA   0.786
4439            LG    0.20    0.25    5.80    0.25      27
4440            UI       0     102     333     547     722    1142    1060     769     572     362
4441            UI     174     127      70      31      32      31       0       0       0       0
4442            UI       0       0       0       0       0       0       0       0       0       0
4443            UI       0       0       0       0       0       0       0       0       0       0
4444            UI       0       0       0       0       0       0       0       0       0       0
                *

4445            KK  DL03REDIVERT
4446            KM        Master Drainage Study for Arizona Traditions
4447            DT    RL03    68.1     0.0
4448            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4449            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

4450            KK     L20BASIN
4451            KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST
4452            KM        BEARDSLEY CSR ON THE EAST AND BELL POINT I
4453            BA   0.347
4454            LG    0.27    0.28    5.60    0.24      20
```

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4455          UI       0      42     117     211     271     391     493     364     281     204
4456          UI     118      72      48      27      13      13      13       0       0       0
4457          UI       0       0       0       0       0       0       0       0       0       0
4458          UI       0       0       0       0       0       0       0       0       0       0
4459          UI       0       0       0       0       0       0       0       0       0       0
              *

4460          KK  DL20REDIVERT
4461          KM        Bell Pointe I and II, Arizona Traditions Parcel XIV
4462          DT    RL20    21.3     0.0
4463          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4464          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE113

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

4465          KK  L20L03ROUTE
4466          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
4467          KM        width based on aerial
4468          KM        Manning's N Value: earth w/ sparse trees and shrubs
4469          RS       6    FLOW
4470          RC   0.032   0.032   0.032    5440  0.0055    0.00
4471          RX  100.00  106.00  112.00  124.00  136.00  148.00  168.00  188.00
4472          RY  1310.5 1310.30 1310.00 1307.00 1307.10 1310.00 1310.30 1310.50
              *

4473          KK   CPL03COMBINE
4474          HC       3   1.295
              *

4475          KK  DL03SEDIVERT
4476          KM        Diversion at Bell Rd near Citrus
4477          KM        Culverts under Bell Rd to south
4478          DT   DL03S     0.0     0.0
4479          DI     0.0    37.0   237.0   537.0  1037.0     0.0     0.0     0.0     0.0     0.0
4480          DQ     0.0    37.0    37.0   337.0   837.0     0.0     0.0     0.0     0.0     0.0
              *

4481          KK  L03L04ROUTE
4482          KM        Cross-section: Cross section estimated from aerial for 1/2 street sectio
4483          KM        Manning's N Value: street, earth with sparse trees and shrubs
4484          RS       8    FLOW
4485          RC   0.032   0.013   0.013    3413  0.0046    0.00
4486          RX  100.00  103.00  123.00  123.10  162.00  162.10  165.00  169.00
4487          RY  1000.2 1000.10  999.50  999.00  999.80 1000.30 1000.40 1000.50
              *

4488          KK     L04BASIN
4489          KM        BASIN BOUNDARY FROM HAPPY TRAILS DEVLP
4490          BA   0.631
4491          LG    0.18    0.25    5.00    0.38      22
4492          UI       0      74     199     362     466     640     898     677     528     391
4493          UI     261     128     100      68      22      23      22      23       0       0
4494          UI       0       0       0       0       0       0       0       0       0       0
4495          UI       0       0       0       0       0       0       0       0       0       0
4496          UI       0       0       0       0       0       0       0       0       0       0
              *

4497          KK  DL04REDIVERT
4498          KM        Retention volume estimated based on aerial, Happy Trails
4499          DT    RL04    44.0     0.0
4500          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4501          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE114

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

4502          KK   CPL04COMBINE
4503          HC       2   1.926
              *

4504          KK  DL04SEDIVERT
4505          KM        Intersection diversion Bell Rd at Cotton Ln
4506          DT   DL04S     0.0     0.0
4507          DI     0.0     0.0    56.3   171.0  1026.0  1998.0  4546.0     0.0     0.0     0.0
4508          DQ     0.0     0.0     0.0    36.0   526.0  1058.0  2453.0     0.0     0.0     0.0
              *

4509          KK  L04L05ROUTE
4510          KM        Cross-section: Cross-section determined from aerial
4511          KM        Manning's N Value: retention basins, earth w/ grass
4512          RS       1    FLOW
4513          RC   0.025   0.025   0.025    2571  0.0024    0.00
4514          RX  100.00  109.00  109.10  121.50  209.50  209.60  211.00  215.00
4515          RY  1283.3 1282.80 1282.30 1282.50 1282.60 1283.00 1283.10 1283.30
              *

4516          KK     L02BASIN
4517          KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
4518          BA   1.884
4519          LG    0.22    0.26    5.20    0.31      31
4520          UI       0     164     249     626     824    1004    1218    1647    2056    1566
4521          UI    1303    1062     855     641     370     278     220     166      84      50
4522          UI      51      50      50      51       0       0       0       0       0       0
4523          UI       0       0       0       0       0       0       0       0       0       0
4524          UI       0       0       0       0       0       0       0       0       0       0
              *

4525          KK  DL02REDIVERT
4526          KM        Master Drainage Report for Del Webb's Grand Avenue Property
4527          DT    RL02   117.2     0.0
4528          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4529          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4530          KK  L02L05ROUTE
4531          KM        Cross-section: Cross-section determined from
4532          KM        EX_SPLIT.DAT model received on May 6, 2009 from PB.
4533          RS       1    FLOW
4534          RC   0.035   0.015   0.035    5263  0.0045    0.00
4535          RX    0.00    3.00    5.00   17.00   25.00   37.00   49.00   52.00
4536          RY  1290.0 1290.00 1289.00 1283.00 1283.00 1289.00 1290.00 1290.00
              *

4537          KK     L05BASIN
4538          KM        BASIN BOUNDARY FROM COMM DEVLP AND BELL WEST RANCH
```

```
BA   0.486
LG    0.23    0.25    5.70    0.24      43
UI       0      68     253     389     545     828     602     436     296     139
UI      91      50      21      21      22       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
```



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

UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DL05REDIVERT
KM        Final Drainage Report for Cotton Lane Professional Park, Drainage Report
KM        Bell West Ranch Shops, Final Drainage Report - Bell West Ranch Parcel 4
KM        Master Drainage Report - Bell West Ranch
DT    RL05    33.2     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPL05COMBINE
HC       3   4.296
*

KK  L05L09ROUTE
KM        Cross-section: Cross-section determined from
KM        EX_SPLIT.DAT model received on May 6, 2009 from PB.
RS       2    FLOW
RC   0.035   0.015   0.035    5376  0.0036    0.00
RX    0.00    3.00    5.00   16.00   26.00   37.00   57.00   60.00
RY  1269.5 1268.50 1268.50 1263.00 1263.00 1268.50 1268.50 1269.50
*

KK     L09BASIN
KM        BASIN BOUNDARY FROM SURPRISE FARMS
BA   0.489
LG    0.27    0.27    5.70    0.24      31
UI       0      60     177     306     399     582     700     507     385     275
UI     145     100      60      29      18      19      18       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DL09REDIVERT
KM        Final Drainage Report for Parcels 2-7 of Surprise Farms, Parcel 8 (Basin
KM        Final Drainage Report for Safeway Store #1997, Retention Calculations fo
KM        New Dysart Elementary School No. 9 at Site J (excess of 3.30 ac-ft)
DT    RL09    40.3     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPL09COMBINE
HC       2   4.785
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  L0913BROUTE
KM        Cross-section: Determined from EX_SPLIT.DAT model received
KM        on May 6, 2009 from PB, Greenway to Waddell Basin Divert-RLPUS
RS       1    FLOW
RC   0.035   0.015   0.035    3314  0.0037    0.00
RX    0.00    3.00    5.00   15.00   29.00   39.00   59.00   62.00
RY  1248.0 1247.00 1247.00 1242.00 1242.00 1247.00 1247.00 1248.00
*

KK  DL13BNDIVERT
KM        Final Drainage Report for Parcels 2-7 of Surprise Farms, Parcel 8 (Basin
DT  DL13BR     0.0     0.0
DI     0.0    12.0   300.0   400.0   500.0   600.0   700.0   783.0   900.0     0.0
DQ     0.0     0.0   119.8   194.4   278.8   367.9   466.2   549.0   663.0     0.0
*

KK  DL13BNRETRIEVE
DR  DL13BR
*

KK  SRL13BSTORAGE
KM        STORAGE THROUGH WADDELL BASIN-SRLP2A, EX_SPLIT.DAT
KM        MODEL FROM PB RECEIVED MAY 6, 2009
KO
RS       1    STOR
SV            0.48    1.95    4.98   22.89   33.96   64.20   71.91   79.96   88.17
SQ            6.20   18.40   19.40   22.90   25.22   28.20  245.30  767.10 1687.80
SE  1223.0 1224.00 1225.00 1226.00 1230.00 1233.00 1237.00 1238.00 1239.00 1240.00
ST
*

KK  CPL13BCOMBINE
HC       2   4.785
*

KK  L13B13ROUTE
KM        Cross-section: Determined from EX_SPLIT.DAT model
KM        received on May 6, 2009 from PB, Waddell Basin overflow
KM        combine to Waddell Road-RLPDS
RS       1    FLOW
RC   0.035   0.015   0.035    1594  0.0036    0.00
RX    0.00    3.00    5.00   15.00   31.00   41.00   61.00   64.00
RY  1134.0 1133.00 1132.90 1128.00 1127.90 1132.90 1133.00 1134.00
*

KK     L13BASIN
KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
KM        EASTERN BOUNDARY LOOP 303
BA   0.483
LG    0.49    0.25    4.90    0.43       3
UI       0      29      30      42      70     126     171     159     225     225
UI     244     247     242     215     204     226     158     162     143     110
UI      97      82      89      56      49      45      37      35      26      27
UI      24      17      16      17      16       8       3       4       3       4
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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4622        UI       4    .  3       4       3       4       4       3       4       3       4
            *

4623        KK     L06BASIN
4624        KM         BASIN BOUNDARY FROM SURPRISE FARMS AND SF SCHOOL DISTRICT
4625        BA   0.696
4626        LG    0.28    0.29    5.30    0.27      23
4627        UI       0     103     394     599     875    1203     839     597     364     176
4628        UI     111      46      32      31       0       0       0       0       0       0
4629        UI       0       0       0       0       0       0       0       0       0       0
4630        UI       0       0       0       0       0       0       0       0       0       0
4631        UI       0       0       0       0       0       0       0       0       0       0
            *

4632        KK  DL06REDIVERT
4633        KM         Final Drainage Report for Surprise Farms Phase 5 (Tracts A1, B, C1, G, K
4634        KM         O, P, Q S1N, S1S, Z), Drainage Report for Surprise Farms
4635        KM         Phase 4 Parcel 1 (TR-1D, 1F, 3A1,  & 3A2 (3As in Parcel 4B)),
4636        KM         Drainage Report for City of Surprise Surprise Farms Park (Basins 1, 2, 5
4637        KM         Drainage Report for Surprise Farms Phase 4B Infrastructure (Retention
4638        KM         in Surrounding Basins except for missing reports: TR-2B1, 2B2, 3N,
4639        KM         3H, 3K, 4J), Drainage Report for Surprise Farms Phase 4 Parcel 5
4640        KM         (TR-5A1, 5A2, 5B West, 5B East, 5D), Drainage Report for
4641        KM         Surprise Farms Phase 4 Parcel 6 (TR 6J), Drainage Report for
4642        KM         Surprise Farms Phase III Parcel 1 (Retention Basin 1,2,3,4)
4643        KM         Drainage Report for Surprise Farms Phase III Parcel 2
4644        KM         (Basins 1,2,3,4,5), Drainage Report for Surprise Farms Phase III Parcel
4645        KM         for Surprise Farms Phase III Parcel  4 (Basin 1,3,6), Drainage Report
4646        KM         for Surprise Farms Phase III Parcel 5 (Basin 1), Drainage
4647        KM         Report for Surprise Farms Phase III Parcel 3
4648        KM         (Basin 1, 2, 3, 4), Drainage Report for New
4649        KM         Dysart Preschool (One basin on N Corner), Drainage Report for
4650        KM         Dysart Elementary School No 15 and Preschool
4651        DT    RL06     59.3     0.0
4652        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4653        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4654        KK  DL06SEDIVERT
4655        KM         179th at Greeway split flow
4656        DT   DL06S      0.0     0.0
4657        DI     0.0    125.4   973.2  2548.4  5028.3     0.0     0.0     0.0     0.0     0.0
4658        DQ     0.0    125.4   973.2  2275.2  4106.2     0.0     0.0     0.0     0.0     0.0
            *

4659        KK  L06L07ROUTE
4660        KM         Cross-section: Cross-section determined from A-team survey
4661        KM         / Manning's N Value: street and earth channel with sparse trees and shru
4662        RS       1    FLOW
4663        RC   0.032   0.013   0.013    2771  0.0031    0.00
4664        RX  100.00  100.10  100.20  122.00  126.00  133.00  146.00  159.00
4665        RY  1286.2 1286.10 1286.00 1282.00 1282.00 1283.00 1283.00 1283.80
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4666        KK     L07BASIN
4667        KM         BASIN BOUNDARY FROM SURPRISE FARMS
4668        BA   0.632
4669        LG    0.28    0.29    5.30    0.28      26
4670        UI       0      88     314     493     682    1054     795     581     404     190
4671        UI     126      75      27      27      28       0       0       0       0       0
4672        UI       0       0       0       0       0       0       0       0       0       0
4673        UI       0       0       0       0       0       0       0       0       0       0
4674        UI       0       0       0       0       0       0       0       0       0       0
            *

4675        KK  DL07REDIVERT
4676        KM         Drainage Report for Surprise Farms Phase II Infrastructure, Drainage
4677        KM         Report for Surprise Farms Community Park (Community Parks Basin A, B)
4678        KM         Pavement Drainage Report for Surprise Farms School Site
4679        KM         (High School Basin A, B1, C1, D, E, F1), Drainage Report for
4680        KM         Surprise Farms Phase 2 Parcel 6, Drainage Report for Surprise
4681        KM         Farms Phase III Parcel 6 (Basins 1,2,3,4,5), Drainage Report for Surpris
4682        KM         Farms Phase 2 Parcel 1, Drainage Report for Surprise Farms
4683        KM         Phase 2 Parcel 5, Drainage Report for Surprise Farms Phase 2 Parcel 2,
4684        KM         Drainage Report for Surprise Farms Phase 2 Parcel 4,
4685        KM         Drainage Report for Surprise Farms
4686        KM         Phase 2 Parcel 3, Drainage Report for City of Surprise Surprise Farms Pa
4687        KM         Drainage Report for Surprise Farms Phase 2 Parcel 1
4688        DT    RL07     46.3     0.0
4689        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4690        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4691        KK  DL03SERETRIEVE
4692        DR   DL03S
            *

4693        KK  L0307AROUTE
4694        KM         Cross-section: Channel is 16' wide and 2' deep with 4: side slopes per
4695        KM         Surprise Farms Phase II Infrastructure Report (Report 287)
4696        KM         Manning's N Value: riprap and pavement
4697        RS       3    FLOW
4698        RC   0.013   0.032   0.032    3088  0.0052    0.00
4699        RX  100.00  119.00  119.50  155.00  163.00  171.00  172.00  173.00
4700        RY  1000.0  999.60 1000.10  999.50  997.50  999.50  999.70 1000.00
            *

4701        KK  L0307BROUTE
4702        KM         Cross-section: Cross section determined from aerial, 1/2 street section
4703        KM         Manning's N Value: pavement, earth with sparse trees and shrubs
4704        RS      12    FLOW
4705        RC   0.013   0.013   0.032    2848  0.0018    0.00
4706        RX  100.00  100.10  105.00  115.00  115.10  115.50  132.00  134.00
4707        RY  1001.0 1000.00  999.90  999.60 1000.10 1000.20 1000.30 1000.40
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4708        KK   CPL07COMBINE
4709        HC       3   2.623
            *

4710        KK  DL07SEDIVERT
```

```
4711        KM        Paradise at Greenway split flow
4712        DT   DL07S      0.0      0.0
4713        DI     0.0    233.4    660.0   1459.1   2912.5      0.0      0.0      0.0      0.0      0.0
4714        DQ     0.0     47.7    135.0    309.0    902.5      0.0      0.0      0.0      0.0      0.0
            *

4715        KK  L07L08ROUTE
4716        KM        Cross-section: Cross-section determined from A-team survey
4717        KM        Manning's N Value: clean earth; straight
4718        RS       1    FLOW
4719        RC   0.022   0.022   0.022    2557  0.0041    0.00
4720        RX  100.00  100.90  101.00  115.00  127.00  150.00  151.00  152.00
4721        RY  1279.6 1279.50 1277.50 1275.50 1278.50 1279.50 1279.60 1279.70
            *

4722        KK     L08BASIN
4723        KM        BASIN BOUNDARY FROM SURPRISE FARMS
4724        BA   0.485
4725        LG    0.27    0.17    7.30    0.13      31
4726        UI       0      55     144     267     341     463     668     535     415     309
4727        UI     219     114      85      55      25      17      17      17       0       0
4728        UI       0       0       0       0       0       0       0       0       0       0
4729        UI       0       0       0       0       0       0       0       0       0       0
4730        UI       0       0       0       0       0       0       0       0       0       0
            *

4731        KK  DL08REDIVERT
4732        KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A on
4733        KM        same as Tract O), Final Drainage Report for Parcel 13 of Surprise Farms
4734        KM        Drainage Report for Surprise Farms Parcel 9 (Tract K and 9), Final Drai
4735        KM        Parcel 10 & 11 of Surprise Farms (Tract L, M, N), Drainage Report for S
4736        KM        Parcel 15 (Basins A & B only, Basin C in School Site), Drainage Report f
4737        KM        Elementary School No 18, Remaining retention volume estimated based on a
4738        DT    RL08     39.4     0.0
4739        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4740        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4741        KK  DL04SERETRIEVE
4742        DR   DL04S
            *

4743        KK  L04L08ROUTE
4744        KM        Cross-section: Cross-section determined from aerial
4745        KM        Manning's N Value: street and earth with sparse trees and shrubs
4746        RS       1    FLOW
4747        RC   0.013   0.013   0.032    5352  0.0042    0.00
4748        RX  100.00  100.10  100.20  115.20  115.30  115.40  145.00  153.00
4749        RY  1000.0  999.90  999.80  999.50 1000.00 1000.10 1000.20 1000.30
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4750        KK   CPL08COMBINE
4751        HC       3   3.739
            *

4752        KK  L08L12ROUTE
4753        KM        Cross-section: Cross-section determined from aerial
4754        KM        Manning's N Value: street, earth with grass and forbs
4755        RS      14    FLOW
4756        RC   0.013   0.025   0.025    5397  0.0031    0.00
4757        RX  100.00  107.00  112.00  116.00  122.00  126.00  165.00  280.00
4758        RY  1248.5 1248.50 1248.00 1247.50 1247.51 1248.00 1248.20 1248.50
            *

4759        KK     L10BASIN
4760        KM        BASIN BOUNDARY FROM SIERRA MONTANA
4761        KM        WADDELL HACIENDAS AND BEARDSLEY CSR
4762        BA   0.844
4763        LG    0.27    0.25    4.55    0.38      18
4764        UI       0      95     240     449     577     766    1141     935     733     554
4765        UI     408     214     156      97      57      29      29      29       0       0
4766        UI       0       0       0       0       0       0       0       0       0       0
4767        UI       0       0       0       0       0       0       0       0       0       0
4768        UI       0       0       0       0       0       0       0       0       0       0
            *

4769        KK  DL10REDIVERT
4770        KM        Final Drainage Report for Sierra Montana Parcel 4 (Basins 1, 2), Drainag
4771        KM        Sierra Montana Parcel 1 (Basins 1,2,3,3A,3B), Drainage Report for Sierra
4772        KM        Parcel 3 (Basins 3,3A,3B,3C), Drainage Report for Sierra Montana Infastr
4773        KM        Phase II (P2 Retention), Sierra Montana Final Drainage Report Parcel 5 (
4774        KM        Sierra Montana Final Drainage Report Parcel 6 (Basins 1,2,3,4,6)
4775        DT    RL10     34.2     0.0
4776        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4777        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4778        KK  L10L11ROUTE
4779        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4780        KM        on aerial / Manning's N Value: earth with sparse trees and shrubs
4781        RS       3    FLOW
4782        RC   0.032   0.032   0.032    3249  0.0031    0.00
4783        RX  100.00  100.10  100.20  112.00  154.00  166.00  183.00  185.00
4784        RY  1000.2 1000.10 1000.00  997.00  997.00 1000.00 1000.30 1000.40
            *

4785        KK  DL06SERETRIEVE
4786        DR   DL06S
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4787        KK  L06L11ROUTE
4788        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4789        KM        on aerial / Manning's N Value: earth w/ sparse trees and shrubs
4790        RS       1    FLOW
4791        RC   0.032   0.032   0.032    8226  0.0043    0.00
4792        RX  100.00  106.00  112.00  124.00  154.00  166.00  172.00  178.00
4793        RY  1290.5 1290.30 1290.00 1287.00 1287.10 1290.00 1290.30 1290.50
            *

4794        KK     L11BASIN
4795        KM        BASIN BOUNDARY FROM SIERRA MONTANA
4796        KM        WADDELL CHANNEL DESIGNED FOR 512 CFS PER DEVELOPMENT RPT
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4797          BA   0.622
4798          LG    0.25    0.25    4.90    0.34      34
4799          UI       0      80     264     433     572     903     839     608     452     287
4800          UI     139     100      55      25      25       0       0       0       0       0
4801          UI       0       0       0       0       0       0       0       0       0       0
4802          UI       0       0       0       0       0       0       0       0       0       0
4803          UI       0       0       0       0       0       0       0       0       0       0
              *

4804          KK  DL11REDIVERT
4805          KM        Sierra Montana Parcel 8 (Basins 8, 8A, 8B), Parcel 9 (Basins 9, 9A, 8C),
4806          KM        Parcel 12 (included in Parcel 14 report), Parcel 14 (Basins 1,2,3a,3b,4a
4807          KM        OS4,OS5 (Includes Retention for P14 &12)), Parcel 20 (Basins R20C, R20,
4808          KM        1S and 1N estimated from aerial, Infrastructure Phase I (Retention from
4809          DT    RL11    47.6     0.0
4810          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4811          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4812          KK  DL07SERETRIEVE
4813          DR   DL07S
              *

4814          KK  L07L11ROUTE
4815          KM        Cross-section: 3' deep, 6:1 side slope and 6' bottom width per
4816          KM        Drainage Report for Sierra Montana Infrastructure Phase I (Report 909)
4817          KM        Manning's N Value: earth with sparse trees and shrubs
4818          RS      16    FLOW
4819          RC   0.032   0.032   0.032    8463  0.0026    0.00
4820          RX  100.00  101.00  102.00  120.00  126.00  144.00  145.00  146.00
4821          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
              *

4822          KK   CPL11COMBINE
4823          HC       4   4.089
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4824          KK  DL11SEDIVERT
4825          KM        Waddell at 173rd alignment split flow
4826          DT   DL11S     0.0     0.0
4827          DI     0.0   309.0  1207.7  2631.3  4439.4     0.0     0.0     0.0     0.0     0.0
4828          DQ     0.0     0.0    22.5   147.6   353.8     0.0     0.0     0.0     0.0     0.0
              *

4829          KK  L11L12ROUTE
4830          KM        Cross-section: Cross-section determined from aerial
4831          KM        Manning's N Value: earth with grass and forbs
4832          RS       2    FLOW
4833          RC   0.025   0.025   0.025    2002  0.0032    0.00
4834          RX  100.00  110.00  180.00  190.00  200.00  220.00  240.00  240.10
4835          RY  1249.5 1249.00 1248.50 1247.00 1248.50 1248.70 1248.80 1249.50
              *

4836          KK     L12BASIN
4837          KM        BASIN BOUNDARY FROM SIERRA MONTANA, AG LAND AND 1990 TOPO
4838          BA   0.358
4839          LG    0.39    0.25    6.20    0.22      10
4840          UI       0      30      40     111     150     179     214     274     383     308
4841          UI     255     211     170     137      93      53      48      33      29       9
4842          UI       9       9       9       9       0       0       0       0       0       0
4843          UI       0       0       0       0       0       0       0       0       0       0
4844          UI       0       0       0       0       0       0       0       0       0       0
              *

4845          KK  DL12REDIVERT
4846          KM        Sierra Montana Parcel 16 (Basins 10A, 16B), Parcel 15 (Basins 15A, 15B,
4847          KM        Parcel 18 (Basins 18A-D), Sierra Montana Crossings
4848          DT    RL12     9.0     0.0
4849          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4850          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4851          KK   CPL12COMBINE
4852          HC       3   5.563
              *

4853          KK   DL121DIVERT
4854          KM        Waddell at Cotton split flow
4855          DT  DL121S     0.0     0.0
4856          DI     0.0  3141.9  7409.3 13063.4 20317.2     0.0     0.0     0.0     0.0     0.0
4857          DQ     0.0   550.7  2126.5  4314.6  7195.9     0.0     0.0     0.0     0.0     0.0
              *

4858          KK   DL122DIVERT
4859          KM        Waddell at Cotton split flow
4860          DT  DL122S     0.0     0.0
4861          DI     0.0  2591.2  5282.9  8748.8 13121.3     0.0     0.0     0.0     0.0     0.0
4862          DQ     0.0    31.8    90.0   165.3   254.6     0.0     0.0     0.0     0.0     0.0
              *
```



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

4863          KK  L12L13ROUTE
4864          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4865          KM        Manning's N Value: Ag field
4866          RS       3    FLOW
4867          RC   0.038   0.038   0.038    2537  0.0051    0.00
4868          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4869          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4870          KK   CPL13COMBINE
4871          HC       3   8.905
              *

4872          KK  L13DS5ROUTE
4873          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
4874          KM        model received on May 6, 2009 from PB,
4875          KM        Waddell Road to Drop Structure 5-RLP1-1
4876          RS       1    FLOW
4877          RC   0.035   0.015   0.035    2450  0.0035    0.00
4878          RX    0.00    3.00    5.00   17.00   33.00   45.00   65.00   68.00
4879          RY  1227.0 1226.00 1225.90 1220.00 1220.10 1225.90 1226.00 1227.00
              *
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4880          KK  DS5L19ROUTE
4881          KM        Cross-section: Determined from EX_SPLIT.DAT model
4882          KM        received on May 6, 2009 from PB, Drop Structure 5
4883          KM        to Cactus Road-RLP1-2
4884          RS       1    FLOW
4885          RC   0.035   0.015   0.035    2632  0.0033    0.00
4886          RX    0.00    3.00    5.00   17.00   42.00   54.00   74.00   77.00
4887          RY  1217.0 1216.00 1215.90 1210.00 1209.90 1215.90 1216.00 1217.00
              *

4888          KK     L14BASIN
4889          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
4890          BA   0.229
4891          LG    0.35    0.35    4.15    0.44       0
4892          UI       0      63     244     397     407     270     159      95      58      34
4893          UI      18      11      11       0       0       0       0       0       0       0
4894          UI       0       0       0       0       0       0       0       0       0       0
4895          UI       0       0       0       0       0       0       0       0       0       0
4896          UI       0       0       0       0       0       0       0       0       0       0
              *

4897          KK  L14L15ROUTE
4898          KM        Cross-section: Cross-section determined from aerial
4899          KM        Manning's N Value: earth w/ sparse trees and brush
4900          RS       1    FLOW
4901          RC   0.032   0.032   0.032    3624  0.0055    0.00
4902          RX  100.00  101.00  145.00  159.00  171.00  180.00  196.00  197.00
4903          RY  1295.0 1295.00 1294.00 1292.00 1292.00 1294.00 1295.00 1295.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4904          KK     L15BASIN
4905          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
4906          BA   0.372
4907          LG    0.34    0.34    4.35    0.39       0
4908          UI       0      87     339     575     634     479     294     181     118      67
4909          UI      46      19      16      17       0       0       0       0       0       0
4910          UI       0       0       0       0       0       0       0       0       0       0
4911          UI       0       0       0       0       0       0       0       0       0       0
4912          UI       0       0       0       0       0       0       0       0       0       0
              *

4913          KK   CPL15COMBINE
4914          HC       2   0.601
              *

4915          KK  L15L16ROUTE
4916          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditchmoved)
4917          KM        Manning's N Value: earth with grass and forbs (route is in area that
4918          KM        was an orchard but all trees have been removed)
4919          RS       2    FLOW
4920          RC   0.025   0.025   0.025    2662  0.0068    0.00
4921          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4922          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4923          KK     L16BASIN
4924          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND 1990 TOPO
4925          BA   0.502
4926          LG    0.46    0.27    4.25    0.58       0
4927          UI       0      34      35      63     105     192     191     260     272     288
4928          UI     288     279     242     256     205     192     157     133     100     103
4929          UI      77      60      52      43      39      31      32      21      19      20
4930          UI      20       5       4       4       5       4       4       5       4       4
4931          UI       4       5       4       4       4       5       4       4       4       0
              *

4932          KK   CPL16COMBINE
4933          HC       2   1.103
              *

4934          KK  L16L17ROUTE
4935          KM        Cross-section: Cross-section determined from Sarah Ann Ranch
4936          KM        report and aerial / Manning's N Value: earth w/grass and forbs
4937          RS       1    FLOW
4938          RC   0.025   0.025   0.025    2699  0.0067    0.00
4939          RX  100.00  101.00  102.00  118.00  138.00  154.00  154.50  155.00
4940          RY  1000.0  999.90  999.80  996.00  996.00  999.80  999.90 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4941          KK     L17BASIN
4942          KM        BASIN BOUNDARY FROM SARAH ANN RANCH UNIT1 AND UNIT2
4943          BA   0.504
4944          LG    0.25    0.25    4.30    0.48      34
4945          UI       0      68     236     373     508     801     649     477     346     180
4946          UI     112      69      25      21      21       0       0       0       0       0
4947          UI       0       0       0       0       0       0       0       0       0       0
4948          UI       0       0       0       0       0       0       0       0       0       0
4949          UI       0       0       0       0       0       0       0       0       0       0
              *

4950          KK  DL17REDIVERT
4951          KM        Final Drainage Report for Sarah Ann Ranch
4952          DT    RL17    49.0     0.0
4953          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4954          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4955          KK   CPL17COMBINE
4956          HC       2   1.607
              *

4957          KK  DL17SEDIVERT
4958          KM        Cactus at 175th Ave split flow
4959          DT   DL17S     0.0     0.0
4960          DI     0.0   513.8   736.5  1344.5  2447.7     0.0     0.0     0.0     0.0     0.0
4961          DQ     0.0     8.1    70.1   289.8   732.1     0.0     0.0     0.0     0.0     0.0
              *

4962          KK  L17L18ROUTE
4963          KM        Cross-section: Ag field, assumed 0.5% side
4964          KM        slopes, V-ditch / Manning's N Value: Ag field
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```
4965          RS       4    FLOW
4966          RC   0.038   0.038   0.038    2641  0.0047    0.00
4967          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4968          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4969          KK     L18BASIN
4970          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
4971          BA   0.500
4972          LG    0.50    0.25    4.65    0.49       0
4973          UI       0      30      31      45      75     137     178     170     233     244
4974          UI     254     257     257     216     218     230     158     176     136     116
4975          UI      94      88      84      59      48      44      39      34      27      28
4976          UI      21      18      17      18      15       4       4       4       4       3
4977          UI       4       4       4       4       3       4       4       4       4       3
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4978          KK  DL11SERETRIEVE
4979          DR   DL11S
              *

4980          KK  L11L18ROUTE
4981          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4982          KM        Manning's N Value: Ag. Field
4983          RS      41    FLOW
4984          RC   0.038   0.038   0.038    5630  0.0064    0.00
4985          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4986          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4987          KK   DL121RETRIEVE
4988          DR  DL121S
              *

4989          KK  L12L18ROUTE
4990          KM        Cross-section: Cross-section determined from aerial
4991          KM        Manning's N Value: earth with grass and forbs, Ag field
4992          RS       6    FLOW
4993          RC   0.025   0.025   0.038    5298  0.0044    0.00
4994          RX  100.00  100.50  101.00  127.00  145.00  160.70  266.00  375.00
4995          RY  1245.0 1244.90 1244.80 1244.00 1243.90 1244.80 1244.60 1245.00
              *

4996          KK   CPL18COMBINE
4997          HC       4    7.67
              *

4998          KK   DL181DIVERT
4999          KM        Cactus at Cotton split flow
5000          DT  DL181S     0.0     0.0
5001          DI     0.0   266.3   983.8  2332.9  4215.1     0.0     0.0     0.0     0.0     0.0
5002          DQ     0.0     0.0    18.6    70.5   191.6     0.0     0.0     0.0     0.0     0.0
              *

5003          KK   DL182DIVERT
5004          KM        Cactus at Cotton split flow
5005          DT  DL182S     0.0     0.0
5006          DI     0.0   266.3   965.1  2262.4  4023.5     0.0     0.0     0.0     0.0     0.0
5007          DQ     0.0    12.7    36.0    66.1   101.8     0.0     0.0     0.0     0.0     0.0
              *

5008          KK  L18L19ROUTE
5009          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5010          KM        Manning's N Value: Ag field
5011          RS       4    FLOW
5012          RC   0.038   0.038   0.038    2608  0.0042    0.00
5013          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5014          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                          PAGE127

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

5015          KK     L19BASIN
5016          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
5017          BA   0.488
5018          LG    0.49    0.25    4.45    0.56       4
5019          UI       0      30      31      47      76     139     178     177     227     251
5020          UI     253     257     249     211     227     203     157     176     120     110
5021          UI      89      92      68      54      49      39      37      29      28      26
5022          UI      17      17      17      17       8       4       3       4       4       4
5023          UI       4       3       4       4       4       4       3       4       4       4
              *

5024          KK   DL122RETRIEVE
5025          DR  DL122S
              *

5026          KK  L12L19ROUTE
5027          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5028          KM        Manning's N Value: Ag field
5029          RS      32    FLOW
5030          RC   0.038   0.038   0.038    5877  0.0045    0.00
5031          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5032          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5033          KK   CPL19COMBINE
5034          HC       4    11.5
              *

5035          KK  L19DS7ROUTE
5036          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5037          KM        model received on May 6, 2009 from PB,
5038          KM        Cactus Road to Drop Structure 7-RLP1-2
5039          RS       1    FLOW
5040          RC   0.035   0.015   0.035    2065  0.0040    0.00
5041          RX    0.00    3.00    5.00   17.00   52.00   64.00   84.00   87.00
5042          RY  1204.0 1203.00 1202.90 1197.00 1196.90 1202.90 1203.00 1204.00
              *

5043          KK  DS7L27ROUTE
5044          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5045          KM        on May 6, 2009 from PB, Drop Structure 7 to Peoria Ave-RLP2-2
5046          RS       1    FLOW
```

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5047          RC   0.035   0.015   0.035    3055  0.0033    0.00
5048          RX    0.00    3.00    5.00   17.00   62.00   74.00   94.00   97.00
5049          RY  1196.0 1195.00 1194.90 1189.00 1188.90 1194.90 1195.00 1196.00
              *

5050          KK     L23BASIN
5051          KM        BASIN BOUNDARY FROM BEARDSLEY CSR AND 1990 TOPO
5052          BA   0.905
5053          LG    0.35    0.35    4.30    0.41       0
5054          UI       0     132     515     767    1109    1584    1090     776     486     228
5055          UI     149      63      41      40       0       0       0       0       0       0
5056          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                                    PAGE128

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

5057          UI       0       0       0       0       0       0       0       0       0       0
5058          UI       0       0       0       0       0       0       0       0       0       0
              *

5059          KK  L23L24ROUTE
5060          KM        Cross-section: Cross-section determined from aerial
5061          KM        Manning's N Value: clean earth; straight
5062          RS       1    FLOW
5063          RC   0.022   0.022   0.022    2628  0.0080    0.00
5064          RX  100.00  101.00  161.00  175.00  189.00  203.00  228.00  229.00
5065          RY  1000.8 1000.30 1000.00  998.00  997.90 1000.00 1000.40 1000.80
              *

5066          KK     L24BASIN
5067          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
5068          BA   0.498
5069          LG    0.48    0.26    4.45    0.54       0
5070          UI       0      33      33      55      92     165     190     216     259     275
5071          UI     273     277     240     232     240     172     187     133     117      95
5072          UI     101      66      56      50      40      37      30      30      22      18
5073          UI      19      18      10       4       5       4       4       4       4       4
5074          UI       4       4       4       4       4       4       5       4       4       4
              *

5075          KK   CPL24COMBINE
5076          HC       2   1.403
              *

5077          KK  L24L26ROUTE
5078          KM        Cross-section: Cross-section determined from aerial
5079          KM        Manning's N Value: clean earth; straight
5080          RS       3    FLOW
5081          RC   0.022   0.022   0.022    5301  0.0074    0.00
5082          RX  100.00  200.00  279.00  286.00  289.00  295.00  311.00  315.00
5083          RY  1207.3 1206.50 1206.00 1204.00 1203.90 1206.50 1207.00 1207.25
              *

5084          KK     L25BASIN
5085          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
5086          KM        AG LAND, AND EASTERN AG CHANNEL
5087          BA   0.244
5088          LG    0.50    0.25    4.65    0.49       0
5089          UI       0      12      12      13      23      33      52      71      66      78
5090          UI      90     102     101     102     103      99      84      86      92      74
5091          UI      63      73      52      47      40      35      37      32      23      21
5092          UI      19      15      16      13      12      11      11       7       7       7
5093          UI       7       7       5       1       2       1       2       1       2       1
              *

5094          KK  L25L26ROUTE
5095          KM        Cross-section: Cross-section determined from aerial
5096          KM        Manning's N Value: clean earth; straight
5097          RS       2    FLOW
5098          RC   0.022   0.022   0.013    5339  0.0073    0.00
5099          RX  100.00  105.00  109.00  116.00  119.00  125.00  141.00  145.00
1                                          HEC-1 INPUT                                                    PAGE129

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

5100          RY  1206.2 1206.10 1206.00 1204.00 1203.90 1206.50 1207.00 1207.20
              *

5101          KK   DL181RETRIEVE
5102          DR  DL181S
              *

5103          KK  L18L26ROUTE
5104          KM        Cross-section: Cross-section determined from 1992 topo
5105          KM        Manning's N Value: half street, clean earth
5106          RS       7    FLOW
5107          RC   0.013   0.022   0.022    5297  0.0130    0.00
5108          RX  100.00  105.00  112.00  121.00  139.00  153.00  154.00  154.00
5109          RY  1206.7 1206.60 1206.50 1206.00 1206.00 1208.00 1208.10 1208.20
              *

5110          KK  DL17SERETRIEVE
5111          DR   DL17S
              *

5112          KK  L17L26ROUTE
5113          KM        Cross-section: Ag field, assumed 0.5% side slopes
5114          KM        V-ditch / Manning's N Value: Ag field
5115          RS      29    FLOW
5116          RC   0.038   0.038   0.038    6336  0.0059    0.00
5117          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5118          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5119          KK     L26BASIN
5120          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
5121          BA   0.757
5122          LG    0.50    0.25    4.55    0.52       0
5123          UI       0      45      45      64     105     193     265     240     356     337
5124          UI     379     379     379     337     321     339     268     245     237     177
5125          UI     156     129     138      97      80      72      59      55      44      42
5126          UI      42      26      26      25      26      19       5       6       6       5
5127          UI       6       6       5       6       6       5       6       5       6       6
              *

5128          KK   CPL26COMBINE
5129          HC       5  10.074
              *

5130          KK  DL26SEDIVERT
```

```
5131          KM        Peoria at Cotton Split flow
5132          DT   DL26S     0.0     0.0
5133          DI     0.0   190.7   867.7  2116.3  3794.4     0.0     0.0     0.0     0.0     0.0
5134          DQ     0.0     0.0     4.0    26.4    59.2     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE130

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

5135          KK  L26L27ROUTE
5136          KM        Cross-section: Cross-section determined from aerial
5137          KM        Manning's N Value: clean earth, street
5138          RS      2    FLOW
5139          RC  0.022   0.022   0.013    2725  0.0070    0.00
5140          RX 100.00  100.50  363.00  373.00  378.00  388.00  400.00  401.00
5141          RY 1202.6 1202.10 1202.00 1200.00 1200.10 1202.00 1202.20 1205.55
              *

5142          KK     L27BASIN
5143          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
5144          KM        AG LAND, EASTERN BOUNDARY LOOP 303
5145          BA   0.508
5146          LG    0.47    0.25    4.65    0.48       5
5147          UI       0      32      33      51      84     153     188     194     245     269
5148          UI     269     272     253     225     239     200     172     171     124     108
5149          UI      91      97      61      54      47      40      36      30      29      22
5150          UI      18      18      18      13       4       4       5       4       4       4
5151          UI       4       4       4       4       4       4       4       4       4       4
              *

5152          KK   DL182RETRIEVE
5153          DR  DL182S
              *

5154          KK  L18L27ROUTE
5155          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5156          KM        Manning's N Value: Ag field
5157          RS     19    FLOW
5158          RC  0.038   0.038   0.038    5929  0.0061    0.00
5159          RX 100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5160          RY 1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5161          KK   CPL27COMBINE
5162          HC      4  14.412
              *

5163          KK  L27L34ROUTE
5164          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5165          KM        on May 6, 2009 from PB, Peoria Ave to CP in L34-RLP3-1
5166          RS      1    FLOW
5167          RC  0.035   0.022   0.035    2233  0.0034    0.00
5168          RX   0.00    3.00    5.00   17.00   62.00   74.00   94.00   97.00
5169          RY 1177.0 1176.00 1175.90 1170.00 1169.90 1176.00 1176.00 1177.00
              *

5170          KK  DL34BNDIVERT
5171          KM        OLIVE BASIN DIVERT-DLP3A FROM EX_SPLIT.DAT MODEL
5172          DT  DL34BR     0.0     0.0
5173          DI    0.0   415.0  1000.0  1500.0  2000.0  2500.0  3000.0  3500.0  4000.0  4500.0
5174          DQ    0.0     0.0   356.0   688.0   956.0  1301.0  1714.0  2144.0  2567.0  3027.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5175          KK  DL34BNRETRIEVE
5176          DR  DL34BR
              *

5177          KK  SRL34BSTORAGE
5178          KM        STORAGE THROUGH OLIVE BASIN FROM EX_SPLIT.DAT MODEL
5179          KO
5180          RS      1    STOR
5181          SV           1.76    6.08   14.84   92.90  207.45  310.42  338.42  366.89  395.64
5182          SQ          11.00   36.50   59.50   87.90  125.40  531.20 1478.50 2805.30 5584.10
5183          SE 1157.0 1158.00 1159.00 1160.00 1164.00 1169.00 1173.00 1174.00 1175.00 1176.00
5184          ST
              *

5185          KK   CPL34COMBINE
5186          HC      2  14.412
              *

5187          KK  L34B34ROUTE
5188          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5189          KM        model received on May 6, 2009 from PB, Olive Basin
5190          KM        overflow combine to Olive Road-RLP3-2
5191          RS      1    FLOW
5192          RC  0.035   0.015   0.035    2685  0.0026    0.00
5193          RX   0.00    3.00    5.00   15.00   41.00   51.00   71.00   74.00
5194          RY 1174.0 1173.00 1173.00 1167.00 1167.00 1173.00 1173.00 1174.00
              *

5195          KK     L33BASIN
5196          KM        BASIN BOUNDARY FROM LARGE LOT HOMES OF MARICOPA COUNTY
5197          BA   0.651
5198          LG    0.33    0.26    4.30    0.45       5
5199          UI       0      60     104     242     317     386     484     698     676     520
5200          UI     422     344     264     156     104      84      60      32      18      18
5201          UI      19      18       0       0       0       0       0       0       0       0
5202          UI       0       0       0       0       0       0       0       0       0       0
5203          UI       0       0       0       0       0       0       0       0       0       0
              *

5204          KK  DL33SEDIVERT
5205          KM        Olive at Cotton split flow
5206          DT   DL33S     0.0     0.0
5207          DI    0.0   200.5   987.1  2321.7  4115.6     0.0     0.0     0.0     0.0     0.0
5208          DQ    0.0     0.0     2.7    97.9   266.6     0.0     0.0     0.0     0.0     0.0
              *

5209          KK  L33L34ROUTE
5210          KM        Cross-section: Cross-section determined from 1991 topo and
5211          KM        aerial/ Manning's N Value: earth w/ sparse trees and brush
5212          RS      1    FLOW
5213          RC  0.032   0.032   0.032    2761  0.0051    0.00
5214          RX 100.00  106.00  112.00  124.00  130.00  142.00  162.00  182.00
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5215          RY  1178.2 1178.10 1178.00 1174.00 1174.10 1176.00 1176.20 1176.30
              *
1                                        HEC-1 INPUT                                                    PAGE132

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

5216          KK     L34BASIN
5217          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
5218          KM        EASTERN BOUNDARY LOOP 303
5219          BA   0.515
5220          LG    0.49    0.25    4.40    0.57       3
5221          UI       0      31      32      48      78     142     184     179     240     253
5222          UI     265     268     264     220     231     229     165     183     135     120
5223          UI      95      91      84      59      50      45      39      34      29      29
5224          UI      20      18      18      17      14       4       4       4       4       4
5225          UI       4       4       4       4       4       4       4       4       4       3
              *

5226          KK  DL26SERETRIEVE
5227          DR   DL26S
              *

5228          KK  L26L34ROUTE
5229          KM        Cross-section: side slopes, width based on aerial and topo
5230          KM        Manning's N Value: clean earth; straight
5231          RS      29    FLOW
5232          RC   0.038   0.038   0.038    5936  0.0062    0.00
5233          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5234          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5235          KK  CPL34BCOMBINE
5236          HC       4  15.578
              *

5237          KK  34DS11ROUTE
5238          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5239          KM        on May 6, 2009 from PB, Olive Road to Drop Structure 11-RLP4-1
5240          RS       1    FLOW
5241          RC   0.035   0.015   0.035    1942  0.0046    0.00
5242          RX    0.00    3.00    5.00   16.00   42.00   53.00   73.00   76.00
5243          RY  1161.5 1160.50 1160.50 1155.00 1155.00 1160.50 1160.50 1161.50
              *

5244          KK  DS1139ROUTE
5245          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5246          KM        on May 6, 2009 from PB, Drop Structure 11 to CP in L39-RLP4-2
5247          RS       1    FLOW
5248          RC   0.035   0.015   0.035    1075  0.0032    0.00
5249          RX    0.00    3.00    5.00   17.00   53.00   65.00   75.00   78.00
5250          RY  1150.0 1149.00 1149.00 1143.00 1143.00 1149.00 1149.00 1150.00
              *

5251          KK    L39ABASIN
5252          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
5253          KM        AND EASTERN BOUNDARY LOOP 303
5254          BA   0.261
5255          LG    0.48    0.25    4.10    0.68       4
5256          UI       0      26      42      99     149     199     224     220     197     195
5257          UI     143     122      88      79      48      40      32      24      20      15
1                                        HEC-1 INPUT                                                    PAGE133

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

5258          UI      16       6       3       3       3       4       3       3       4       3
5259          UI       3       4       3       0       0       0       0       0       0       0
5260          UI       0       0       0       0       0       0       0       0       0       0
              *

5261          KK  CPL39ACOMBINE
5262          HC       2  15.839
              *

5263          KK  DL39BNDIVERT
5264          KM        NORTHERN BASIN DIVERT-2DLP5 FROM EX_SPLIT.DAT MODEL
5265          DI  DL39BR     0.0     0.0
5266          DI     0.0   407.0  1000.0  1500.0  2000.0  2500.0  3000.0     0.0     0.0     0.0
5267          DQ     0.0     0.0   263.0   508.0   778.0  1115.0  1452.0     0.0     0.0     0.0
              *

5268          KK     L28BASIN
5269          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, EASTERN BOUNDARY OF CORTESSA
5270          BA   0.312
5271          LG    0.34    0.34    4.25    0.42       3
5272          UI       0      73     285     481     532     402     247     152      98      56
5273          UI      40      15      14      14       0       0       0       0       0       0
5274          UI       0       0       0       0       0       0       0       0       0       0
5275          UI       0       0       0       0       0       0       0       0       0       0
5276          UI       0       0       0       0       0       0       0       0       0       0
              *

5277          KK  L28L29ROUTE
5278          KM        Cross-section: Cross-section determined from 1990 topo
5279          KM        Manning's N Value: earth w/ sparse trees and brush
5280          RS       2    FLOW
5281          RC   0.032   0.032   0.032    3315  0.0060    0.00
5282          RX  100.00  118.00  134.00  164.00  199.00  243.00  252.00  262.00
5283          RY  1270.0 1269.00 1268.00 1266.00 1265.90 1268.00 1269.00 1270.00
              *

5284          KK     L29BASIN
5285          KM        BASIN BOUNDARY FROM 1990 TOPO, 2008 TOPO AT INTERSECTION
5286          KM        AND FIELD VISIT, WESTERN BOUNDARY DEFINED BY BEARDSLEY CSR
5287          KM        EASTERN BOUNDARY OF CORTESSA
5288          BA   0.245
5289          LG    0.34    0.34    4.40    0.38       0
5290          UI       0      36     133     248     325     337     259     180     123      82
5291          UI      59      39      24      18       9       8       9       0       0       0
5292          UI       0       0       0       0       0       0       0       0       0       0
5293          UI       0       0       0       0       0       0       0       0       0       0
5294          UI       0       0       0       0       0       0       0       0       0       0
              *

5295          KK   CPL29COMBINE
5296          HC       2   0.557
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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5297          KK  DL29SEDIVERT
5298          KM        Diversion at canal overtopping, assume 50-50 split
5299          DT   DL29S     0.0     0.0
5300          DI     0.0   100.0  1000.0  5000.0 10000.0     0.0     0.0     0.0     0.0     0.0
5301          DQ     0.0    50.0   500.0  2500.0  5000.0     0.0     0.0     0.0     0.0     0.0
              *

5302          KK  L29L36ROUTE
5303          KM        Cross-section: Estimated 5' deep and 6:1 side slopes, width based
5304          KM        on aerial / Manning's N Value: clean earth; straight
5305          RS       4    FLOW
5306          RC   0.022   0.022   0.022    6696  0.0066    0.00
5307          RX  100.00  112.00  121.00  151.00  186.00  216.00  228.00  244.00
5308          RY  1220.5 1220.30 1220.00 1215.00 1215.10 1220.00 1220.30 1220.50
              *

5309          KK     L35BASIN
5310          KM        BASIN BOUNDARY FROM 1990 TOPO AND FIELD VISIT
5311          BA   0.517
5312          LG    0.35    0.35    4.45    0.37       0
5313          UI       0     102     398     701     831     709     453     293     190     120
5314          UI      77      54      21      22      21       0       0       0       0       0
5315          UI       0       0       0       0       0       0       0       0       0       0
5316          UI       0       0       0       0       0       0       0       0       0       0
5317          UI       0       0       0       0       0       0       0       0       0       0
              *

5318          KK  DL29SERETRIEVE
5319          DR   DL29S
              *

5320          KK  L29L35ROUTE
5321          KM        Cross-section: Cross-section determined from aerial
5322          KM        Manning's N Value: earth w/ sparse trees and brush
5323          RS       7    FLOW
5324          RC   0.032   0.032   0.032    3510  0.0006    0.00
5325          RX  100.00  120.00  140.00  145.00  155.00  160.00  180.00  200.00
5326          RY  1234.0 1233.50 1233.00 1231.50 1231.50 1232.00 1232.00 1232.00
              *

5327          KK   CPL35COMBINE
5328          HC       2   1.074
              *

5329          KK  L35L37ROUTE
5330          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5331          KM        Manning's N Value: avg value for cultivated areas
5332          RS       9    FLOW
5333          RC   0.038   0.038   0.038    6221  0.0058    0.00
5334          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5335          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5336          KK     L37BASIN
5337          KM        BASIN BOUNDARY FROM NORTH EASTERN BASIN BOUNDARY
5338          KM        AND ENGINEERED CHANNEL
5339          BA   0.399
5340          LG    0.35    0.35    4.15    0.44       0
5341          UI       0      81     318     559     649     541     343     221     141      88
5342          UI      56      37      17      16      17       0       0       0       0       0
5343          UI       0       0       0       0       0       0       0       0       0       0
5344          UI       0       0       0       0       0       0       0       0       0       0
5345          UI       0       0       0       0       0       0       0       0       0       0
              *

5346          KK     L36BASIN
5347          KM        BASIN BOUNDARY FROM WHITE TANK FOOTHILLS / CORTESSA
5348          KM        SW BOUNDARY BASED ON ENGINEERED CHANNEL
5349          BA   0.466
5350          LG    0.35    0.35    4.10    0.46       0
5351          UI       0      91     342     513     858     736     491     296     134      77
5352          UI      24      25       0       0       0       0       0       0       0       0
5353          UI       0       0       0       0       0       0       0       0       0       0
5354          UI       0       0       0       0       0       0       0       0       0       0
5355          UI       0       0       0       0       0       0       0       0       0       0
              *

5356          KK  DL36REDIVERT
5357          KM        Retention volume estimated based on aerial
5358          DT    RL36    34.9     0.0
5359          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5360          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5361          KK   CPL36COMBINE
5362          HC       4   1.939
              *

5363          KK  L36L38ROUTE
5364          KM        Cross-section determined from EX_SPLIT.DAT
5365          KM        EX_SPLIT.DAT model received on May 6, 2009 from PB,
5366          KM        EX_SPLIT.DAT model received on May 6, 2009 from PB, Citrus Rd to Cotton
5367          RS       3    FLOW
5368          RC   0.030   0.030   0.030    5316  0.0028    0.00
5369          RX    0.00   36.60   42.60   48.60   54.60   60.60   66.60  103.20
5370          RY  1190.6 1184.50 1184.50 1184.50 1184.50 1184.50 1184.50 1190.60
              *

5371          KK     L30BASIN
5372          KM        BASIN BOUNDARY FROM CORTESSA
5373          BA   0.535
5374          LG    0.27    0.26    4.55    0.39      33
5375          UI       0     100     385     575     943     864     574     359     156      97
5376          UI      32      27      28       0       0       0       0       0       0       0
5377          UI       0       0       0       0       0       0       0       0       0       0
5378          UI       0       0       0       0       0       0       0       0       0       0
5379          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5380          KK  DL30REDIVERT
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5381          KM        Retention volume estimated based on aerial
5382          DT    RL30     37.1      0.0
5383          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5384          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5385          KK  L30L31ROUTE
5386          KM        Cross-section: Cross section estimated from aerial; road
5387          KM        Manning's N Value: earth w/ sparse trees and shrubs; street ROB
5388          RS       3    FLOW
5389          RC   0.032   0.032   0.016    2808  0.0078    0.00
5390          RX  100.00  101.00  102.00  114.00  116.00  128.00  148.00  168.00
5391          RY  1227.0 1226.00 1225.00 1223.00 1223.10 1225.00 1225.10 1225.20
              *

5392          KK     L31BASIN
5393          KM        BASIN BOUNDARY FROM CORTESSA
5394          BA   0.422
5395          LG    0.26    0.25    4.45    0.42      37
5396          UI       0     201     621    1099     766     366     136      41      32       0
5397          UI       0       0       0       0       0       0       0       0       0       0
5398          UI       0       0       0       0       0       0       0       0       0       0
5399          UI       0       0       0       0       0       0       0       0       0       0
5400          UI       0       0       0       0       0       0       0       0       0       0
              *

5401          KK  DL31REDIVERT
5402          KM        Retention volume estimated based on aerial
5403          DT    RL31     31.6      0.0
5404          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5405          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5406          KK   CPL31COMBINE
5407          HC       2   0.957
              *

5408          KK  L31L32ROUTE
5409          KM        Cross-section: Estimated 2' deep and 6:1 side slopes, width based on
5410          KM        aerial / Manning's N Value: clean earth; straight; ROB street
5411          RS       3    FLOW
5412          RC   0.022   0.022   0.016    3746  0.0069    0.00
5413          RX  100.00  120.00  140.00  152.00  154.00  166.00  176.00  186.00
5414          RY  1194.5 1194.30 1194.00 1192.00 1192.10 1194.00 1194.30 1194.50
              *

5415          KK     L32BASIN
5416          KM        BASIN BOUNDARY FROM CORTESSA
5417          BA   0.352
5418          LG    0.35    0.35    4.10    0.46       1
5419          UI       0     107     425     667     618     384     223     131      74      45
5420          UI      17      19       0       0       0       0       0       0       0       0
5421          UI       0       0       0       0       0       0       0       0       0       0
```



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

5422          UI       0       0       0       0       0       0       0       0       0       0
5423          UI       0       0       0       0       0       0       0       0       0       0
              *

5424          KK   CPL32COMBINE
5425          HC       2   1.309
              *

5426          KK  L32L38ROUTE
5427          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
5428          KM        on aerial / Manning's N Value: clean earth; straight, street LOB
5429          RS       8    FLOW
5430          RC   0.038   0.038   0.038    5549  0.0068    0.00
5431          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5432          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5433          KK     L38BASIN
5434          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHYAND AG LAND
5435          BA   1.005
5436          LG    0.45    0.25    4.60    0.47       2
5437          UI       0      63      63      97     159     289     367     368     468     523
5438          UI     523     530     511     439     467     413     328     358     246     224
5439          UI     183     191     134     111     101      78      78      58      57      52
5440          UI      36      35      36      35      13       7       8       8       8       8
5441          UI       8       8       7       8       8       8       8       8       7       8
              *

5442          KK  DL33SERETRIEVE
5443          DR   DL33S
              *

5444          KK  L33L38ROUTE
5445          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
5446          KM        on aerial / Manning's N Value: clean earth; straight, street LOB
5447          RS      12    FLOW
5448          RC   0.016   0.022   0.022    5310  0.0060    0.00
5449          RX  100.00  112.00  124.00  132.00  140.00  148.00  168.00  188.00
5450          RY  1170.5 1170.30 1170.00 1167.00 1167.10 1170.00 1170.30 1170.50
              *

5451          KK   CPL38COMBINE
5452          HC       4   4.904
              *

5453          KK  L38L39ROUTE
5454          KM        Cross-section determined from EX_SPLIT.DAT
5455          KM        model received on May 6, 2009 from PB,
5456          KM        Cotton Rd to Northern Basin-RNR3
5457          RS       3    FLOW
5458          RC   0.038   0.022   0.013    2555  0.0039    0.00
5459          RX  100.00  101.00  550.00  555.00  562.00  566.00  580.00  595.00
5460          RY  1146.8 1146.20 1146.00 1144.50 1144.60 1146.00 1146.20 1146.80
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5461          KK     L39BASIN
5462          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
5463          KM        AND EASTERN BOUNDARY LOOP 303
5464          BA   0.246
```

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5465          LG    0.48    0.25    4.45    0.55       4
5466          UI       0      25      37      90     139     179     208     206     187     186
5467          UI     131     121      85      73      52      38      31      23      21      14
5468          UI      14       9       3       3       3       3       3       3       3       3
5469          UI       3       3       4       0       0       0       0       0       0       0
5470          UI       0       0       0       0       0       0       0       0       0       0
              *

5471          KK  DL39BNRETRIEVE
5472          DR  DL39BR
              *

5473          KK  CPL39BCOMBINE
5474          HC       3  20.338
              *

5475          KK  SRL39BSTORAGE
5476          KM        STORAGE THROUGH NORTHERN BASIN FROM EX_SPLIT.DAT MODEL
5477          KO
5478          RS       1    STOR
5479          SV           1.55    5.79   14.58   51.34  127.03  207.82  293.85  323.72  355.57
5480          SQ          16.20   56.50   35.50   83.50   97.60  123.80  301.70  369.10 1007.60
5481          SE  1124.0 1125.00 1126.00 1127.00 1129.00 1132.00 1135.00 1138.00 1139.00 1140.00
5482          ST
              *

5483          KK   CPL39COMBINE
5484          HC       2  20.338
              *

5485          KK  39DS13ROUTE
5486          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5487          KM        on May 6, 2009 from PB, Northern to Drop Structure 13-RLP5-1
5488          RS       1    FLOW
5489          RC   0.035   0.015   0.035    2427  0.0034    0.00
5490          RX    0.00   10.00   13.00   23.00   43.00   53.00   73.00   74.80
5491          RY  1130.0 1130.00 1129.00 1124.00 1124.00 1129.00 1129.40 1130.00
              *

5492          KK  DS1344ROUTE
5493          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5494          KM        on May 6, 2009 from PB, Drop Structure 13 to Glendale Ave-RLP5-2
5495          RS       1    FLOW
5496          RC   0.035   0.015   0.035    2700  0.0028    0.00
5497          RX    0.00   10.00   13.00   25.00   47.00   59.00   79.00   80.80
5498          RY  1121.0 1121.00 1120.00 1114.00 1114.00 1120.00 1120.40 1130.00
              *
1                                          HEC-1 INPUT                                          PAGE139

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

5499          KK     L41BASIN
5500          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5501          BA   0.249
5502          LG    0.30    0.25    4.60    0.34       5
5503          UI       0      34     111     182     242     390     324     238     174      96
5504          UI      56      36      15      10      10       0       0       0       0       0
5505          UI       0       0       0       0       0       0       0       0       0       0
5506          UI       0       0       0       0       0       0       0       0       0       0
5507          UI       0       0       0       0       0       0       0       0       0       0
              *

5508          KK  DL41SEDIVERT
5509          KM        Glendale at 185th split flow
5510          DT   DL41S     0.0     0.0
5511          DI     0.0    15.2   324.5  1021.5  2211.8     0.0     0.0     0.0     0.0     0.0
5512          DQ     0.0    15.2   203.0   611.7  1283.9     0.0     0.0     0.0     0.0     0.0
              *

5513          KK  L41L42ROUTE
5514          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width based
5515          KM        on aerial / Manning's N Value: clean earth; straight, street ROB
5516          RS       2    FLOW
5517          RC   0.022   0.022   0.016    3951  0.0040    0.00
5518          RX  100.00  115.00  130.00  136.00  139.00  145.00  157.00  167.00
5519          RY  1166.5 1166.30 1166.00 1164.00 1164.10 1166.00 1166.30 1166.50
              *

5520          KK     L42BASIN
5521          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5522          BA   0.740
5523          LG    0.30    0.25    4.10    0.46       5
5524          UI       0      71     131     293     382     473     598     865     732     581
5525          UI     463     367     265     144     118      77      60      22      22      22
5526          UI      22      21       0       0       0       0       0       0       0       0
5527          UI       0       0       0       0       0       0       0       0       0       0
5528          UI       0       0       0       0       0       0       0       0       0       0
              *

5529          KK   CPL42COMBINE
5530          HC       2   0.989
              *

5531          KK   DL421DIVERT
5532          KM        Glendale at Citrus split flow
5533          DT  DL421S     0.0     0.0
5534          DI     0.0   189.3   751.3  2087.6  4053.5     0.0     0.0     0.0     0.0     0.0
5535          DQ     0.0    91.1   387.9  1123.4  2232.7     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE140

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

5536          KK   DL422DIVERT
5537          KM        Glendale at Citrus split flow
5538          DT  DL422S     0.0     0.0
5539          DI     0.0    98.2   363.4   964.2  1820.8     0.0     0.0     0.0     0.0     0.0
5540          DQ     0.0    30.7    76.1   133.6   200.9     0.0     0.0     0.0     0.0     0.0
              *

5541          KK  L42L43ROUTE
5542          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
5543          KM        based on aerial / Manning's N Value: clean earth;
5544          KM        straight, street ROB
5545          RS       5    FLOW
5546          RC   0.022   0.022   0.013    5319  0.0056    0.00
5547          RX  100.00  100.50  224.00  230.00  233.00  239.00  262.50  263.00
5548          RY  1136.7 1136.50 1136.00 1134.00 1134.10 1136.35 1136.50 1136.65
```

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                *
5549            KK     L43BASIN
5550            KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5551            BA   0.997
5552            LG    0.30     0.25     4.20     0.43        5
5553            UI       0      128      405      675      889     1378     1368      994      741      490
5554            UI     235      172      102       40       39       39        0        0        0        0
5555            UI       0        0        0        0        0        0        0        0        0        0
5556            UI       0        0        0        0        0        0        0        0        0        0
5557            UI       0        0        0        0        0        0        0        0        0        0
                *

5558            KK   CPL43COMBINE
5559            HC       2   1.986
                *

5560            KK   DL431DIVERT
5561            KM        Glendale at Cotton split flow
5562            DT  DL431S      0.0      0.0
5563            DI     0.0    174.4   1002.0   2334.9   4460.0      0.0      0.0      0.0      0.0      0.0
5564            DQ     0.0      0.0      3.8     19.5     58.9      0.0      0.0      0.0      0.0      0.0
                *

5565            KK   DL432DIVERT
5566            KM        Glendale at Cotton split flow
5567            DT  DL432S      0.0      0.0
5568            DI     0.0    174.4    998.2   2315.4   4401.1      0.0      0.0      0.0      0.0      0.0
5569            DQ     0.0      0.6     20.8     54.9     98.4      0.0      0.0      0.0      0.0      0.0
                *

5570            KK  L43L44ROUTE
5571            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
5572            KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
5573            RS        2    FLOW
5574            RC   0.038    0.032    0.013     2574   0.0039     0.00
5575            RX  100.00   105.00   430.00   444.00   449.00   463.00   478.00   479.00
5576            RY  1126.8 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.80
                *
1                                          HEC-1 INPUT                                          PAGE141

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

5577            KK     L44BASIN
5578            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
5579            KM        AND EASTERN BOUNDARY LOOP 303
5580            BA   0.478
5581            LG    0.46     0.25     4.15     0.66        7
5582            UI       0       30       31       50       82      147      178      189      237      256
5583            UI     256      256      237      213      232      178      167      152      117       97
5584            UI      88       84       58       49       43       38       32       28       28       18
5585            UI      17       17       18        8        3        4        4        4        4        4
5586            UI       3        4        4        4        4        3        4        4        4        4
                *

5587            KK   CPL44COMBINE
5588            HC       3  22.802
                *

5589            KK  44DS14ROUTE
5590            KM        Cross-section: Determined from EX_SPLIT.DAT model received
5591            KM        on May 6, 2009 from PB, Glendale to Drop Structure 14-RLP6-1
5592            RS        1    FLOW
5593            RC   0.035    0.015    0.035     2567   0.0038     0.00
5594            RX    0.00    10.00    13.00    25.00    50.00    62.00    82.00    83.80
5595            RY  1109.0 1109.00 1108.00 1102.00 1102.00 1108.00 1108.40 1109.00
                *

5596            KK  DS1449ROUTE
5597            KM        Cross-section: Determined from EX_SPLIT.DAT model received
5598            KM        on May 6, 2009 from PB, Drop Structure 14 to Bethany Home Rd-RLP6-2
5599            RS        1    FLOW
5600            RC   0.035    0.015    0.035     2480   0.0041     0.00
5601            RX    0.00    10.00    13.00    25.00    50.00    62.00    82.00    83.80
5602            RY  1097.0 1097.00 1096.00 1090.00 1090.00 1096.00 1096.40 1097.00
                *

5603            KK     L40BASIN
5604            KM        BASIN BOUNDARY FROM BEARDSLEY CSR
5605            KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
5606            BA   0.610
5607            LG    0.35     0.35     4.25     0.42        0
5608            UI       0       88      325      607      796      839      652      449      312      209
5609            UI     147      101       64       47       22       21       22       22        0        0
5610            UI       0        0        0        0        0        0        0        0        0        0
5611            UI       0        0        0        0        0        0        0        0        0        0
5612            UI       0        0        0        0        0        0        0        0        0        0
                *

5613            KK  L40L45ROUTE
5614            KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
5615            KM        aerial / Manning's N Value: earth w/ sparse trees and brush
5616            RS        2    FLOW
5617            RC   0.032    0.032    0.032     5706   0.0053     0.00
5618            RX  100.00   120.00   128.00   136.00   144.00   152.00   164.00   220.00
5619            RY  1166.5 1166.00 1164.00 1162.00 1161.90 1164.00 1166.00 1166.50
                *
1                                          HEC-1 INPUT                                          PAGE142

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

5620            KK     L45BASIN
5621            KM        BASIN BOUNDARY FROM BEARDSLEY CSR
5622            KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
5623            BA   0.503
5624            LG    0.35     0.35     4.45     0.37        0
5625            UI       0       95      379      660      795      692      452      297      189      123
5626            UI      78       57       21       20       21        0        0        0        0        0
5627            UI       0        0        0        0        0        0        0        0        0        0
5628            UI       0        0        0        0        0        0        0        0        0        0
5629            UI       0        0        0        0        0        0        0        0        0        0
                *

5630            KK   CPL45COMBINE
5631            HC       2   1.113
                *

5632            KK  L45L46ROUTE
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```
5633          KM        Cross-section: Estimated 2' deep; width and side slopes estimated from a
5634          KM        road, / Manning's N Value: clean earth; straight
5635          RS       3    FLOW
5636          RC   0.022   0.022   0.013    2613  0.0023    0.00
5637          RX  100.00  101.00  375.00  380.00  382.00  384.00  389.00  405.00
5638          RY  1143.0 1142.40 1142.00 1140.00 1139.90 1141.00 1142.20 1142.95
              *

5639          KK     L46BASIN
5640          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5641          BA   0.490
5642          LG    0.30    0.25    4.15    0.44       5
5643          UI       0      68     240     375     516     808     624     453     319     155
5644          UI     102      62      21      20      21       0       0       0       0       0
5645          UI       0       0       0       0       0       0       0       0       0       0
5646          UI       0       0       0       0       0       0       0       0       0       0
5647          UI       0       0       0       0       0       0       0       0       0       0
              *

5648          KK  DL41SERETRIEVE
5649          DR   DL41S
              *

5650          KK  L41L46ROUTE
5651          KM        Cross-section: Cross section estimated from aerial; road
5652          KM        Manning's N Value: street and ROW
5653          RS       4    FLOW
5654          RC   0.032   0.016   0.032    6496  0.0049    0.00
5655          RX  100.00  140.00  142.00  152.00  162.00  164.00  174.00  190.00
5656          RY  1167.0 1166.00 1165.50 1165.70 1165.50 1166.00 1166.50 1167.00
              *
1                                          HEC-1 INPUT                                          PAGE143

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

5657          KK   CPL46COMBINE
5658          HC       3   1.852
              *

5659          KK   DL461DIVERT
5660          KM        Bethany Home at 183rd split flow
5661          DT  DL461S     0.0     0.0
5662          DI     0.0   202.4   580.6  1312.2  2324.9     0.0     0.0     0.0     0.0     0.0
5663          DQ     0.0   102.5   110.7   124.7   147.0     0.0     0.0     0.0     0.0     0.0
              *

5664          KK   DL462DIVERT
5665          KM        Bethany Home at 183rd split flow
5666          DT  DL462S     0.0     0.0
5667          DI     0.0   100.0   469.8  1187.5  2178.0     0.0     0.0     0.0     0.0     0.0
5668          DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
              *

5669          KK  L46L47ROUTE
5670          KM        Cross-section: Cross section estimated from aerial; road
5671          KM        Manning's N Value: clean earth; straight; street ROB
5672          RS       1    FLOW
5673          RC   0.022   0.022   0.013    2652  0.0053    0.00
5674          RX  100.00  101.00  250.00  262.00  277.00  289.00  305.00  335.00
5675          RY  1138.9 1138.30 1138.00 1136.00 1136.10 1138.00 1138.40 1138.90
              *

5676          KK     L47BASIN
5677          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5678          BA   0.497
5679          LG    0.35    0.25    4.10    0.51       4
5680          UI       0      40      50     141     195     234     279     341     484     454
5681          UI     358     307     248     203     156      90      69      59      40      29
5682          UI      12      13      12      12      13       0       0       0       0       0
5683          UI       0       0       0       0       0       0       0       0       0       0
5684          UI       0       0       0       0       0       0       0       0       0       0
              *

5685          KK   DL421RETRIEVE
5686          DR  DL421S
              *

5687          KK  L42L47ROUTE
5688          KM        Cross-section: Cross section estimated from 1992 survey
5689          KM        Manning's N Value: clean earth; straight; street LOB
5690          RS       2    FLOW
5691          RC   0.016   0.022   0.016    5287  0.0057    0.00
5692          RX  100.00  112.00  116.00  120.00  125.00  129.00  133.00  150.00
5693          RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1146.00
              *
1                                          HEC-1 INPUT                                          PAGE144

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

5694          KK   CPL47COMBINE
5695          HC       3   3.089
              *

5696          KK   DL471DIVERT
5697          KM        Bethany Home at Citrus split flow
5698          DT  DL471S     0.0     0.0
5699          DI     0.0   379.8  1603.8  3817.4  6818.0     0.0     0.0     0.0     0.0     0.0
5700          DQ     0.0   185.0   185.0   185.0   185.0     0.0     0.0     0.0     0.0     0.0
              *

5701          KK   DL472DIVERT
5702          KM        Bethany Home at Citrus split flow
5703          DT  DL472S     0.0     0.0
5704          DI     0.0   194.8  1418.8  3632.4  6633.0     0.0     0.0     0.0     0.0     0.0
5705          DQ     0.0   179.6  1195.7  2776.3  4806.5     0.0     0.0     0.0     0.0     0.0
              *

5706          KK  L47L48ROUTE
5707          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5708          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
5709          RS       4    FLOW
5710          RC   0.032   0.032   0.013    5306  0.0045    0.00
5711          RX  100.00  140.00  160.00  168.00  174.00  182.00  194.00  206.00
5712          RY  1124.5 1124.25 1124.00 1122.00 1122.10 1124.00 1124.25 1124.50
              *

5713          KK     L48BASIN
5714          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
```

```
5715          BA   1.003
5716          LG    0.35    0.27    4.10    0.51       5
5717          UI       0      99     200     426     548     691     926    1214     960     757
5718          UI     600     473     286     172     141      99      44      31      30      30
5719          UI      31       0       0       0       0       0       0       0       0       0
5720          UI       0       0       0       0       0       0       0       0       0       0
5721          UI       0       0       0       0       0       0       0       0       0       0
              *

5722          KK   DL422RETRIEVE
5723          DR  DL422S
              *

5724          KK  L42L48ROUTE
5725          KM        Cross-section: Cross section estimated from 1992 survey
5726          KM        Manning's N Value: clean earth; straight;
5727          RS       7    FLOW
5728          RC   0.022   0.022   0.022   10523  0.0030    0.00
5729          RX  100.00  125.00  130.00  135.00  138.00  143.00  148.00  168.00
5730          RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1145.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5731          KK   DL431RETRIEVE
5732          DR  DL431S
              *

5733          KK  L43L48ROUTE
5734          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5735          KM        aerial / Manning's N Value: clean earth; straight, street LOB
5736          RS       9    FLOW
5737          RC   0.022   0.022   0.016    5357  0.0045    0.00
5738          RX  100.00  120.00  128.00  136.00  142.00  150.00  170.00  190.00
5739          RY  1120.5 1120.30 1120.00 1118.00 1118.10 1120.00 1120.30 1120.50
              *

5740          KK   CPL48COMBINE
5741          HC       4   5.089
              *

5742          KK   DL481DIVERT
5743          KM        Bethany Home at Cotton split flow
5744          DT  DL481S      0.0     0.0
5745          DI     0.0   398.6  1307.1  2640.8  4556.3     0.0     0.0     0.0     0.0     0.0
5746          DQ     0.0     0.0    16.8    73.0   287.0     0.0     0.0     0.0     0.0     0.0
              *

5747          KK   DL482DIVERT
5748          KM        Bethany Home at Cotton split flow
5749          DT  DL482S      0.0     0.0
5750          DI     0.0   398.6  1290.3  2567.8  4269.2     0.0     0.0     0.0     0.0     0.0
5751          DQ     0.0     3.2    21.1    47.3    79.8     0.0     0.0     0.0     0.0     0.0
              *

5752          KK  L48L49ROUTE
5753          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5754          KM        aerial / Manning's N Value: clean earth; straight; street ROB
5755          RS       2    FLOW
5756          RC   0.022   0.022   0.013    2488  0.0040    0.00
5757          RX  100.00  101.00  540.00  548.00  550.00  558.00  566.00  576.00
5758          RY  1102.7 1102.30 1102.00 1100.00 1100.10 1102.00 1102.25 1102.65
              *

5759          KK     L49BASIN
5760          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
5761          KM        AG LAND, EASTERN BOUNDARY LOOP 303
5762          BA   0.473
5763          LG    0.48    0.25    4.10    0.68       4
5764          UI       0      29      30      46      77     135     174     173     221     247
5765          UI     248     250     238     206     221     194     154     168     116     106
5766          UI      85      90      63      52      47      36      37      27      26      25
5767          UI      17      16      18      16       5       4       4       3       4       4
5768          UI       3       4       4       3       4       4       3       4       4       3
              *
```



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

5769          KK   DL432RETRIEVE
5770          DR  DL432S
              *

5771          KK  L43L49ROUTE
5772          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5773          KM        Manning's N Value: avg value for cultivated areas
5774          RS      20    FLOW
5775          RC   0.038   0.038   0.038    5833  0.0060    0.00
5776          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5777          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5778          KK   CPL49COMBINE
5779          HC       4  26.378
              *

5780          KK  49DS15ROUTE
5781          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5782          KM        on May 6, 2009 from PB, Bethany Home to Drop Structure 15-RLP7-1
5783          RS       1    FLOW
5784          RC   0.035   0.015   0.035    1899  0.0043    0.00
5785          RX    0.00   10.00   13.00   25.00   57.00   69.00   89.00   90.80
5786          RY  1087.0 1087.00 1086.00 1080.00 1080.00 1086.00 1086.40  197.00
              *

5787          KK  DS1554ROUTE
5788          KM        Cross-section: Determined from EX_SPLIT.DAT model received
5789          KM        on May 6, 2009 from PB, Drop Structure 15 to Camelback Road-RLP7-2
5790          RS       1    FLOW
5791          RC   0.035   0.015   0.035    3152  0.0033    0.00
5792          RX    0.00   10.00   13.00   25.00   57.00   69.00   89.00   90.80
5793          RY  1077.0 1077.00 1076.00 1070.00 1070.00 1076.00 1076.40 1077.00
              *

5794          KK     L54BASIN
5795          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
5796          KM        AND EASTERN BOUNDARY LOOP 303
```

```
5797          BA   0.479
5798          LG    0.46    0.24    4.65    0.47       4
5799          UI       0      30      31      48      79     143     177     183     230     254
5800          UI     253     254     240     211     226     190     162     161     117     102
5801          UI      87      92      57      51      46      37      35      27      27      22
5802          UI      17      17      17      13       4       4       3       4       4       4
5803          UI       4       3       4       4       4       3       4       4       4       3
              *

5804          KK   DL482RETRIEVE
5805          DR  DL482S
              *
1                                        HEC-1 INPUT                                          PAGE147

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

5806          KK  L48L54ROUTE
5807          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5808          KM        Manning's N Value: avg value for cultivated areas
5809          RS      27    FLOW
5810          RC   0.038   0.038   0.038    5864  0.0056    0.00
5811          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5812          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5813          KK   CPL54COMBINE
5814          HC       3  26.857
              *

5815          KK  L54W2EROUTE
5816          KM        Cross-section: Determined from Camelback CAR
5817          KM        model REC-EWP.OUT dated July 14, 2008, DIAG
5818          RS       1    FLOW
5819          RC   0.020   0.020   0.020    1400  0.0057    0.00
5820          RX  1000.0 1010.00 1035.00 1036.00 1076.00 1077.00 1082.00 1092.00
5821          RY  1069.0 1069.00 1069.00 1065.00 1065.00 1069.00 1069.00 1069.00
              *

5822          KK  W2EB46ROUTE
5823          KM        Cross-section: Determined from Camelback CAR
5824          KM        model REC-EWP.OUT dated July 14, 2008, -R237
5825          RS       1    FLOW
5826          RC   0.032   0.032   0.032    2640  0.0039    0.00
5827          RX  100.00  124.00  125.00  126.00  145.00  146.00  147.00  171.00
5828          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

5829          KK     B46BASIN
5830          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
5831          KM        PHOTOGRAPHY OF AG LAND AND 1990 TOPO
5832          BA   0.542
5833          LG    0.47    0.25    4.80    0.44       4
5834          UI       0      34      34      53      87     156     198     200     252     284
5835          UI     283     286     274     235     254     222     177     192     134     120
5836          UI      99     103      71      59      54      42      42      31      30      28
5837          UI      19      20      19      19       6       4       4       4       5       4
5838          UI       4       4       5       4       4       4       5       4       4       4
              *

5839          KK   DB441RETRIEVE
5840          DR  DB441S
              *

5841          KK  B44B46ROUTE
5842          KM        Cross-section: Cross-section determined from aerial and 1990 topo
5843          KM        Manning's N Value: clean straight earth
5844          RS       5    FLOW
5845          RC   0.022   0.022   0.022    5267  0.0038    0.00
5846          RX  100.00  123.00  136.00  139.00  143.00  147.00  157.00  167.00
5847          RY  1072.5 1072.30 1072.00 1070.00 1070.10 1072.00 1072.30 1072.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5848          KK   CPB46COMBINE
5849          HC       3   28.69
              *

5850          KK  B46B47ROUTE
5851          KM        Cross-section: Cross-section determined from Camelback
5852          KM        CAR model REC-EWP.OUT dated July 14, 2008, -R238
5853          RS       1    FLOW
5854          RC   0.032   0.032   0.032    1680  0.0015    0.00
5855          RX  100.00  124.00  125.00  126.00  167.00  168.00  169.00  193.00
5856          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

5857          KK     B47BASIN
5858          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
5859          BA   0.496
5860          LG    0.46    0.25    4.90    0.43       5
5861          UI       0      31      31      47      77     140     179     178     230     254
5862          UI     258     259     255     212     230     208     162     177     124     113
5863          UI      90      91      73      56      49      41      38      30      27      28
5864          UI      17      17      18      17       9       4       4       4       4       4
5865          UI       3       4       4       4       4       4       4       3       4       4
              *

5866          KK   DB442RETRIEVE
5867          DR  DB442S
              *

5868          KK  B44B47ROUTE
5869          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5870          KM        Manning's N Value: avg value for cultivated areas
5871          RS      24    FLOW
5872          RC   0.038   0.038   0.038    5832  0.0045    0.00
5873          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5874          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

5875          KK   CPB47COMBINE
5876          HC       4  31.946
              *

5877          KK     B48BASIN
5878          KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
```

```
5879          BA   0.397
5880          LG    0.49    0.25    4.70    0.46       1
5881          UI       0      27      28      51      89     157     152     208     221     232
5882          UI     232     218     193     210     151     160     112     101      79      85
5883          UI      54      45      40      34      28      25      23      16      15      16
5884          UI      12       4       3       3       4       3       4       3       4       3
5885          UI       3       4       3       4       3       3       4       3       0       0
              *
1                                          HEC-1 INPUT                                          PAGE149

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


5886          KK   CPB48COMBINE
5887          HC       2  32.343
              *

5888          KK   SRB48STORAGE
5889          KM        STORAGE THROUGH REEMS ROAD BASIN-DB252,
5890          KM        MODEL REC-EWP.OUT, JULY 14, 2008
5891          KO
5892          RS       1    STOR
5893          SV           23.90   68.50  109.80
5894          SQ          409.00  817.00 1156.00
5895          SE  1041.0 1043.00 1045.00 1047.00
5896          ST
              *

5897          KK  B48B54ROUTE
5898          KM        Cross-section: Cross-section determined from Camelback
5899          KM        CAR model REC-EWP.OUT dated July 14, 2008, -R240
5900          RS       4    FLOW
5901          RC   0.032   0.032   0.032    4128  0.0004    0.00
5902          RX  100.00  124.00  125.00  126.00  166.00  167.00  168.00  192.00
5903          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

5904          KK     B42BASIN
5905          KM        BASIN BOUNDARY FROM LUKE AFB
5906          BA   0.348
5907          LG    0.16    0.25    4.80    0.40      28
5908          UI       0     303     973     934     352      93      35       0       0       0
5909          UI       0       0       0       0       0       0       0       0       0       0
5910          UI       0       0       0       0       0       0       0       0       0       0
5911          UI       0       0       0       0       0       0       0       0       0       0
5912          UI       0       0       0       0       0       0       0       0       0       0
              *

5913          KK  B42B53ROUTE
5914          KM        Cross-section: Cross section estimated from aerial & topo
5915          KM        Manning's N Value: earth w/ sparse trees and brush
5916          RS      30    FLOW
5917          RC   0.032   0.032   0.032   17837  0.0009    0.00
5918          RX  100.00  140.00  180.00  220.00  240.00  280.00  300.00  320.00
5919          RY  1070.5 1070.30 1070.00 1068.00 1068.10 1070.00 1072.00 1074.00
              *

5920          KK     B53BASIN
5921          KM        BASIN BOUNDARY FROM LUKE AFB
5922          BA   1.101
5923          LG    0.19    0.27    4.80    0.38      23
5924          UI       0      84      85     285     379     470     539     648     875    1057
5925          UI     836     710     590     492     411     299     180     144     123      84
5926          UI      71      26      25      26      26      25      26       0       0       0
5927          UI       0       0       0       0       0       0       0       0       0       0
5928          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE150

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


5929          KK   CPB53COMBINE
5930          HC       2   1.449
              *

5931          KK  B53B54ROUTE
5932          KM        Cross-section: Cross-section determined from aerial and 1991 topo
5933          KM        Manning's N Value: earth w/ sparse trees and brush
5934          RS       2    FLOW
5935          RC   0.032   0.032   0.032    3082  0.0042    0.00
5936          RX  100.00  200.00  365.00  540.00  785.00  940.00 1050.00 1130.00
5937          RY  1056.5 1056.30 1056.00 1054.00 1054.10 1056.00 1056.30 1056.50
              *

5938          KK     B49BASIN
5939          KM        BASIN BOUNDARY FROM LUKE AFB
5940          BA   0.323
5941          LG    0.15    0.25    4.70    0.42      29
5942          UI       0     513    1378     507      81       0       0       0       0       0
5943          UI       0       0       0       0       0       0       0       0       0       0
5944          UI       0       0       0       0       0       0       0       0       0       0
5945          UI       0       0       0       0       0       0       0       0       0       0
5946          UI       0       0       0       0       0       0       0       0       0       0
              *

5947          KK  B49B50ROUTE
5948          KM        Cross-section: Cross-section estimated from aerial and topo-road
5949          KM        Manning's N Value: street, parking lot
5950          RS       4    FLOW
5951          RC   0.016   0.016   0.016    6292  0.0016    0.00
5952          RX  100.00  120.00  140.00  142.00  272.00  274.00  294.00  314.00
5953          RY  1075.0 1074.50 1074.00 1073.50 1073.50 1074.00 1074.50 1075.00
              *

5954          KK     B50BASIN
5955          KM        BASIN BOUNDARY FROM LUKE AFB
5956          BA   0.707
5957          LG    0.15    0.25    5.40    0.30      29
5958          UI       0     378    1137    1952    1219     506     184      56       0       0
5959          UI       0       0       0       0       0       0       0       0       0       0
5960          UI       0       0       0       0       0       0       0       0       0       0
5961          UI       0       0       0       0       0       0       0       0       0       0
5962          UI       0       0       0       0       0       0       0       0       0       0
              *

5963          KK  LR02SDRETRIEVE
5964          DR  LR02LR
              *
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5965          KK  B02B50ROUTE
5966          KM        Cross-section: From Litchfield Rd to Bullard Wash Trib outlet thru LAFB
5967          KM        route taken at roadway and parking lots north and south of
5968          KM        roadway per aerial and topo
5969          RS       1    FLOW
5970          RC   0.016   0.016   0.016    4817  0.0016    0.00
1                                          HEC-1 INPUT                                                    PAGE151

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

5971          RX  100.00  120.00  140.00  142.00  272.00  274.00  294.00  314.00
5972          RY  1075.0 1074.50 1074.00 1073.50 1073.40 1074.00 1074.50 1075.00
              *

5973          KK   CPB50COMBINE
5974          HC       3   1.888
              *

5975          KK  B50B51ROUTE
5976          KM        Cross-section: Luke AFB CAR by HDR dated
5977          KM        October 2004, FCD Contract No 2003C018
5978          RS       1    FLOW
5979          RC   0.013   0.013   0.013    1068  0.0013    0.00
5980          RX  100.00  102.00  106.00  110.00  120.00  124.00  128.00  130.00
5981          RY  1070.0 1069.00 1067.00 1065.00 1064.90 1067.00 1069.00 1070.00
              *

5982          KK     B51BASIN
5983          KM        BASIN BOUNDARY FROM LUKE AFB
5984          BA   0.609
5985          LG    0.15    0.25    5.40    0.30      29
5986          UI       0     292    1107    1431     912     477     247     127      56      38
5987          UI       0       0       0       0       0       0       0       0       0       0
5988          UI       0       0       0       0       0       0       0       0       0       0
5989          UI       0       0       0       0       0       0       0       0       0       0
5990          UI       0       0       0       0       0       0       0       0       0       0
              *

5991          KK   CPB51COMBINE
5992          HC       2   2.497
              *

5993          KK  B51B52ROUTE
5994          KM        Cross-section: Luke AFB CAR by HDR dated October 2004,
5995          KM        FCD Contract No 2003C018
5996          RS       2    FLOW
5997          RC   0.030   0.030   0.030    5441  0.0031    0.00
5998          RX  100.00  108.00  116.00  124.00  164.00  172.00  180.00  188.00
5999          RY  1064.0 1062.00 1060.00 1058.00 1057.90 1060.00 1062.00 1064.00
              *

6000          KK     B52BASIN
6001          KM        BASIN BOUNDARY FROM LUKE AFB
6002          BA   0.842
6003          LG    0.31    0.35    5.30    0.26       6
6004          UI       0     193     687    1033    1701    1277     823     399     210      92
6005          UI      46      46       0       0       0       0       0       0       0       0
6006          UI       0       0       0       0       0       0       0       0       0       0
6007          UI       0       0       0       0       0       0       0       0       0       0
6008          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                                    PAGE152

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

6009          KK   CPB52COMBINE
6010          HC       2   3.339
              *

6011          KK  B52B54ROUTE
6012          KM        Cross-section: Cross-section determined from aerial and 1991 topo
6013          KM        Manning's N Value: earth w/ sparse trees and brush
6014          RS       2    FLOW
6015          RC   0.032   0.032   0.032    3082  0.0042    0.00
6016          RX  100.00  200.00  365.00  540.00  785.00  940.00 1050.00 1130.00
6017          RY  1056.5 1056.30 1056.00 1054.00 1054.10 1056.00 1056.30 1056.50
              *

6018          KK     B54BASIN
6019          KM        BASIN BOUNDARY FROM FR CAL FACLON GOLF, ARIZONA MOTORSPORTS PARK,
6020          KM        LAFB BOUNDARY AND CAMELBACK CHANNEL
6021          BA   1.228
6022          LG    0.25    0.31    4.65    0.39      11
6023          UI       0     322    1242    2077    2136    1491     893     541     330     196
6024          UI     116      58      58       0       0       0       0       0       0       0
6025          UI       0       0       0       0       0       0       0       0       0       0
6026          UI       0       0       0       0       0       0       0       0       0       0
6027          UI       0       0       0       0       0       0       0       0       0       0
              *

6028          KK  DB54REDIVERT
6029          KM        Retention volume estimated based on aerial
6030          DT    RB54     9.0     0.0
6031          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6032          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6033          KK   CPB54COMBINE
6034          KM        Bullard Wash at Camelback Road
6035          HC       4  38.359
              *

6036          KK  B54B57ROUTE
6037          KM        Geometry from Bullard Wash L33PE4H9.OUT,
6038          KM        4/18/07 by WoodPatel provided by FCDMC
6039          RS       3    FLOW
6040          RC   0.030   0.030   0.030    5603  0.0020    0.00
6041          RX    0.00   48.90   61.90   74.90   87.90  100.90  113.90  162.70
6042          RY  1047.6 1039.50 1039.50 1039.50 1039.50 1039.50 1039.80 1047.60
              *

6043          KK     B55BASIN
6044          KM        BASIN BOUNDARY FROM 1990 TOPO
6045          BA   0.530
6046          LG    0.49    0.25    4.80    0.45       3
6047          UI       0      32      32      48      78     142     189     178     246     253
6048          UI     270     272     269     231     229     248     168     182     149     123
6049          UI     103      90      94      62      53      47      40      37      30      29
6050          UI      24      18      19      18      18       5       4       4       4       4
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6051          UI       4       4       4       4       4       4       4       4       4       4
              *

6052          KK  B55B56ROUTE
6053          KM        Cross-section: assumed 3' depth, 4:1 sideslope, width based on
6054          KM        aerial / Manning's N Value: clean earth; straight
6055          RS       5    FLOW
6056          RC   0.022   0.022   0.022    7006  0.0027    0.00
6057          RX  100.00  102.00  104.00  124.00  154.00  174.00  194.00  214.00
6058          RY  1037.0 1036.25 1036.00 1033.00 1033.10 1036.00 1036.25 1037.00
              *

6059          KK     B56BASIN
6060          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5
6061          BA   1.136
6062          LG    0.36    0.25    4.70    0.41      14
6063          UI       0      38      38      38      37      70     124     143     168     182
6064          UI     196     214     227     239     268     284     307     355     425     461
6065          UI     497     429     383     356     327     305     291     262     239     227
6066          UI     205     189     176     151     125     110      70      66      66      62
6067          UI      62      51      38      38      38      38      16      11      12      11
              *

6068          KK  DB56REDIVERT
6069          KM        Retention volume estimated based on aerial
6070          DT    RB56    46.1     0.0
6071          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6072          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6073          KK   CPB56COMBINE
6074          HC       2   1.666
              *

6075          KK  B56B57ROUTE
6076          KM        Cross-section: Cross-section determined from Camelback
6077          KM        CAR model REC-EWP.OUT dated July 14, 2008, ~R238
6078          RS       2    FLOW
6079          RC   0.032   0.032   0.032    1680  0.0015    0.00
6080          RX  100.00  124.00  125.00  126.00  167.00  168.00  169.00  193.00
6081          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

6082          KK     B57BASIN
6083          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5 AND 1990 TOPO
6084          BA   1.119
6085          LG    0.24    0.24    5.10    0.33      21
6086          UI       0     156     564     877    1214    1887    1397    1021     710     332
6087          UI     219     128      48      48      48       0       0       0       0       0
6088          UI       0       0       0       0       0       0       0       0       0       0
6089          UI       0       0       0       0       0       0       0       0       0       0
6090          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6091          KK  DB57REDIVERT
6092          KM        Retention volume estimated based on aerial
6093          DT    RB57    80.8     0.0
6094          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6095          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6096          KK   CPB57COMBINE
6097          HC       3  41.144
              *

6098          KK  B57B58ROUTE
6099          KM        Geometry from Bullard Wash L33PE4H9.OUT,
6100          KM        4/18/07 by WoodPatel provided by FCDMC
6101          RS       3    FLOW
6102          RC   0.030   0.030   0.030    5318  0.0027    0.00
6103          RX    0.00   70.00   83.00   96.00  109.00  122.00  135.00  205.00
6104          RY  1022.8 1015.80 1015.70 1015.60 1015.70 1015.80 1015.90 1022.80
              *

6105          KK     B58BASIN
6106          KM        BASIN BOUNDARY FROM PEBBLE CREEK PHASE 1
6107          BA   1.197
6108          LG    0.21    0.25    5.60    0.28      27
6109          UI       0     154     491     816    1072    1678    1637    1197     874     583
6110          UI     275     203     119      48      48      47       0       0       0       0
6111          UI       0       0       0       0       0       0       0       0       0       0
6112          UI       0       0       0       0       0       0       0       0       0       0
6113          UI       0       0       0       0       0       0       0       0       0       0
              *

6114          KK  DB58REDIVERT
6115          KM        Pebblecreek Development Phase I - West Half Drainage
6116          KM        Report, Pebblecreek Development Phase I - East Half Drainage Report
6117          DT    RB58    55.4     0.0
6118          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6119          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6120          KK   CPB58COMBINE
6121          HC       2  42.341
              *

6122          KK  B58B59ROUTE
6123          KM        Geometry from Bullard Wash L33PE4H9.OUT,
6124          KM        4/18/07 by WoodPatel provided by FCDMC
6125          RS       2    FLOW
6126          RC   0.030   0.030   0.030    6454  0.0048    0.00
6127          RX    0.00    0.00   18.40   36.70   55.10   73.40   97.80   91.80
6128          RY  1013.1 1005.70 1005.60 1005.50 1005.60 1005.70 1005.80 1013.10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6129          KK     B59BASIN
6130          KM        BASIN BOUNDARY FROM PUEBLO VERDE, ESTRELLA FALLS, AND RIO PASEO
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6131          BA   0.699
6132          LG    0.42    0.25    5.80    0.27       9
6133          UI       0      33      34      34      93     128     155     173     195     211
6134          UI     240     269     317     396     438     363     315     287     259     228
6135          UI     206     181     160     138     101      69      60      56      55      35
6136          UI      34      33      17      10      10      11      10      10      10      11
6137          UI      10      10       0       0       0       0       0       0       0       0
              *

6138          KK  DB59REDIVERT
6139          KM        Final Drainage Report for Rio Paseo Parcel 8, Drainage Report for
6140          KM        Parcels 9, 10, & 11 of Goodyear Planned Regional Center
6141          KM        (60% retention used)
6142          DT    RB59    10.0     0.0
6143          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6144          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6145          KK   CPB59COMBINE
6146          HC       2   43.04
              *

6147          KK     B64BASIN
6148          KM        BASIN BOUNDARY FROM GOODYEAR PLANNED RC AND ALEXAN ESTRELLA FALLS
6149          BA   0.229
6150          LG    0.36    0.25    4.80    0.42      11
6151          UI       0      16      16      50      71      87     101     118     146     200
6152          UI     188     155     130     110      95      78      55      35      28      25
6153          UI      17      17       5       5       5       5       5       5       5       0
6154          UI       0       0       0       0       0       0       0       0       0       0
6155          UI       0       0       0       0       0       0       0       0       0       0
              *

6156          KK  DB64REDIVERT
6157          KM        Drainage Report for Parcels 9, 10, & 11 of Goodyear Planned
6158          KM        Regional Center (40% retention used)
6159          DT    RB64     2.7     0.0
6160          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6161          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6162          KK  B64B65ROUTE
6163          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6164          KM        Manning's N Value: avg value for cultivated areas from Estimated Manning
6165          KM        Roughness Coefficient for Stream Channels and Flood Plains in MC
6166          RS       7    FLOW
6167          RC   0.038   0.038   0.038    3124  0.0032    0.00
6168          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6169          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6170          KK     B65BASIN
6171          KM        BASIN BOUNDARY FROM 1990 TOPO AND GOODYEAR CENTERPOINTE
6172          BA   0.234
6173          LG    0.45    0.25    5.10    0.39      13
6174          UI       0      36     118     222     291     297     255     189     126      91
6175          UI      55      39      29      20      11       4       5       4       5       4
6176          UI       5       4       0       0       0       0       0       0       0       0
6177          UI       0       0       0       0       0       0       0       0       0       0
6178          UI       0       0       0       0       0       0       0       0       0       0
              *

6179          KK    DB65DIVERT
6180          KM        Bullard Wash divert half of B65 to west.
6181          KM        From Model L33PE4H0.OUT modified
6182          KM        by Wood Patel on April 18, 2007
6183          DT    DB65     0.0     0.0
6184          DI     0.0   500.0  1000.0  5000.0  1000.0     0.0     0.0     0.0     0.0     0.0
6185          DQ     0.0   250.0   500.0   250.0  5000.0     0.0     0.0     0.0     0.0     0.0
              *

6186          KK  CPB65ACOMBINE
6187          HC       3  43.503
              *

6188          KK  DB65BNDIVERT
6189          KM        DIVERT BASIN AT I-10 AND BULLARD WASH-DBD1S PER
6190          KM        BULLARD WASH BASIN HEC-1 L33PE4H9.OUT
6191          KM        DATED APRIL 18, 2007 BY WOOD PATEL
6192          DT   DB65E     0.0     0.0
6193          DI     0.0  1000.0  1370.0  1900.0  2500.0  3000.0  3611.0  4000.0     0.0     0.0
6194          DQ     0.0     0.0     0.0   268.0   717.0  1114.0  1608.0  1899.0     0.0     0.0
              *

6195          KK  B6565BROUTE
6196          KM        Cross-section: Bullard Wash Basin HEC-1 L33PE4H9.OUT
6197          KM        dated April 18, 2007 by Wood Patel, RBD1S
6198          RS       1    FLOW
6199          RC   0.030   0.030   0.030    1254  0.0026    0.00
6200          RX    0.00   34.20   53.20   72.20   91.20  110.20  129.20  163.40
6201          RY  990.70  985.00  985.00  985.00  985.00  985.00  985.00  990.70
              *

6202          KK     B61BASIN
6203          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
6204          KM        BY DEL RIO ENG (2006)
6205          BA   0.963
6206          LG    0.20    0.25    4.80    0.39      27
6207          UI       0      90     159     364     476     591     729    1076     979     764
6208          UI     621     495     380     211     153     117      90      37      27      27
6209          UI      28      28       0       0       0       0       0       0       0       0
6210          UI       0       0       0       0       0       0       0       0       0       0
6211          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6212          KK  DB61REDIVERT
6213          KM        Pebblecreek Phase II Master Drainage Report (east half)
6214          DT    RB61    68.2     0.0
6215          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6216          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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6217          KK  B61B62ROUTE
6218          KM        Cross-section: assumed ROW V-Ditch, 4:1 sideslopes
6219          KM        width based on aerial / Manning's N Value: clean earth;
6220          KM        straight; street LOB
6221          RS      10    FLOW
6222          RC   0.016   0.022   0.022    4105  0.0010    0.00
6223          RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
6224          RY  1012.5 1012.30 1012.00 1009.00 1009.10 1012.00 1012.30 1012.50
              *

6225          KK     B62BASIN
6226          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT BY DEL RIO
6227          KM        ENG (2006), MODIFIED TO INCLUDE NE AREA CONTRIBUTES AT ROAD OVERTOPPING
6228          BA   0.428
6229          LG    0.27    0.27    4.80    0.34      22
6230          UI       0      45     107     208     270     345     505     509     388     297
6231          UI     230     151      79      64      46      17      14      14      14       0
6232          UI       0       0       0       0       0       0       0       0       0       0
6233          UI       0       0       0       0       0       0       0       0       0       0
6234          UI       0       0       0       0       0       0       0       0       0       0
              *

6235          KK  DB62REDIVERT
6236          KM        Retention volume estimated based on aerial
6237          DT    RB62    27.8     0.0
6238          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6239          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6240          KK   CPB62COMBINE
6241          HC       2   1.391
              *

6242          KK  B62B63ROUTE
6243          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6244          KM        Manning's N Value: avg value for cultivated areas from
6245          KM        Estimated Manning's Roughness Coefficient for Stream
6246          KM        Channels and Flood Plains in MC
6247          RS       5    FLOW
6248          RC   0.038   0.038   0.038    1382  0.0058    0.00
6249          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6250          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6251          KK     B63BASIN
6252          KM        BASIN BOUNDARY FROM 1990 TOPO AND PEBBLE CREEK MARKETPLACE
6253          BA   0.124
6254          LG    0.41    0.27    4.80    0.41       9
6255          UI       0      18      51     104     143     153     131     106      79      55
6256          UI      34      25      17      13      10       4       2       2       2       3
6257          UI       2       2       2       0       0       0       0       0       0       0
6258          UI       0       0       0       0       0       0       0       0       0       0
6259          UI       0       0       0       0       0       0       0       0       0       0
              *

6260          KK   CPB63COMBINE
6261          HC       2   1.515
              *

6262          KK   SRB63STORAGE
6263          KM        Basin at I-10
6264          KO
6265          RS       1    STOR
6266          SV            0.17    1.61    4.19
6267          SQ           82.00  694.00 1687.00
6268          SE  1002.8 1003.00 1003.50 1004.00
6269          ST
              *

6270          KK  B63B65ROUTE
6271          KM        Cross-section: Cross-section determined from aerial and
6272          KM        1991 topo / Manning's N Value: earth w/ sparse trees and brush
6273          RS       2    FLOW
6274          RC   0.032   0.032   0.032    2605  0.0054    0.00
6275          RX  100.00  104.00  108.00  122.00  123.00  137.00  140.00  145.00
6276          RY  998.50  998.30  998.00  995.00  995.10  998.00  999.00 1000.00
              *

6277          KK    DB65RETRIEVE
6278          DR    DB65
              *

6279          KK  CPB65BCOMBINE
6280          HC       3  45.018
              *

6281          KK  B65B66ROUTE
6282          KM        Cross-section: Bullard Wash Basin HEC-1 L33PE4H9.OUT
6283          KM        dated April 18, 2007 by Wood Patel, RBD1S
6284          RS       2    FLOW
6285          RC   0.030   0.030   0.030    4400  0.0028    0.00
6286          RX    0.00   28.20   47.20   66.20   85.20  104.20  123.20  151.40
6287          RY  985.80  981.10  981.10  981.10  981.10  981.10  981.10  985.80
              *
1                                          HEC-1 INPUT                                          PAGE159

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

6288          KK     S01BASIN
6289          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR ESTRELLA PARKWAY AND
6290          KM        I-10 DATED 8/26/04 BY KIMLEY HORN, FINAL DRAINAGE REPORT FOR PARKWAY
6291          KM        VILLAGE DATED 11/22/05 BY LANDFORM, FINAL DRAINAGE STATEMENT FOR
6292          KM        ESTRELLA SHOPS C DATED 6/5/07 BY CLC ASSOCIATES, BELLA
6293          BA   0.268
6294          LG    0.25    0.27    4.80    0.40      46
6295          UI       0      38     137     214     298     452     335     242     165      77
6296          UI      51      29      12      11      12       0       0       0       0       0
6297          UI       0       0       0       0       0       0       0       0       0       0
6298          UI       0       0       0       0       0       0       0       0       0       0
6299          UI       0       0       0       0       0       0       0       0       0       0
              *

6300          KK  DS01REDIVERT
6301          KM        Final Drainage Report Estrella Parkway and I-10, Final Drainage Report f
6302          KM        Parkway Village, Final Drainage Report for Canyon Trails Plaza Phase II,
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6303          KM        Final Drainage Statement for Estrella Shops C, Final Drainage Report fo
6304          KM        Safeway at NWC of Estrella Parkway and Van Buren, Bella Rosa Subdivision
6305          KM        Final Drainage Study, Final Drainage Report for Travis Park at Canyon Tr
6306          KM        Parcel 3M1 (portion of retention used), Drainage Report for Canyon Trail
6307          KM        Unit 3A (portion of retention used)
6308          DT    RS01    26.9     0.0
6309          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6310          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6311          KK   DS011DIVERT
6312          KM        Van Buren at Estrella split flow
6313          DT  DS011S     0.0     0.0
6314          DI     0.0   137.2   537.6  1491.9  2902.6     0.0     0.0     0.0     0.0     0.0
6315          DQ     0.0    75.1   298.1   885.3  1750.8     0.0     0.0     0.0     0.0     0.0
              *

6316          KK   DS012DIVERT
6317          KM        Van Buren at Estrella split flow
6318          DT  DS012S     0.0     0.0
6319          DI     0.0    62.1   239.4   606.7  1151.8     0.0     0.0     0.0     0.0     0.0
6320          DQ     0.0    18.2    61.5   119.3   188.6     0.0     0.0     0.0     0.0     0.0
              *

6321          KK  S01B66ROUTE
6322          KM        Cross-section: Estimated 3' deep ; side slopes and
6323          KM        width based on aerial / Manning's N Value: clean straight earth
6324          RS      14    FLOW
6325          RC   0.022   0.022   0.022    3048  0.0052    0.00
6326          RX  100.00  112.00  124.00  134.00  140.00  150.00  158.00  166.00
6327          RY  986.50  986.30  986.00  983.00  983.10  986.00  986.30  986.50
              *
1                                    HEC-1 INPUT                                          PAGE160

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

6328          KK     B66BASIN
6329          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR
6330          KM        SYNDERS OF HANOVER DATED 11/11/05, FINAL DRAINAGE REPORT FOR
6331          KM        RANCHO EL  MIRAGE DATED 6/2/99
6332          BA   0.759
6333          LG    0.39    0.25    4.80    0.43      16
6334          UI       0      56      57     111     215     327     330     432     470     471
6335          UI     470     394     410     340     317     249     203     164     166     108
6336          UI      90      76      69      52      51      37      32      31      32       7
6337          UI       7       7       7       7       7       7       7       7       7       7
6338          UI       7       7       7       7       7       0       0       0       0       0
              *

6339          KK  DB66REDIVERT
6340          KM        Final Drainage Report Snyder's of Hanover I-10 and Bullard Ave
6341          KM        Final Drainage Report for Rancho Mirage, Final Drainage Report for
6342          KM        Southwest Specialty Foods, Drainage Statement for Estrella Crossroads
6343          DT    RB66    13.6     0.0
6344          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6345          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6346          KK   CPB66COMBINE
6347          HC       3  46.045
              *

6348          KK  B66B68ROUTE
6349          KM        Cross-section: Bullard Wash Improvement I-10
6350          KM        to Phase 1 Proposed CLOMR HEC-RAS model,
6351          KM        Section 18226.7
6352          RS       5    FLOW
6353          RC   0.036   0.036   0.036    5325  0.0030    0.00
6354          RX  100.00  126.70  172.70  183.00  213.60  221.80  293.20  313.40
6355          RY  963.50  958.80  958.50  956.50  953.40  958.50  958.80  963.50
              *

6356          KK   DS011RETRIEVE
6357          DR  DS011S
              *

6358          KK  S01S02ROUTE
6359          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
6360          KM        width based on aerial / Manning's N Value: earth with
6361          KM        sparse trees and shrubs; clean straight earth LOB
6362          RS      23    FLOW
6363          RC   0.022   0.032   0.032    5352  0.0034    0.00
6364          RX  100.00  112.00  124.00  136.00  146.00  158.00  170.00  182.00
6365          RY  991.50  991.30  991.00  988.00  988.10  991.00  991.30  991.50
              *
1                                    HEC-1 INPUT                                          PAGE161

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

6366          KK     S02BASIN
6367          KM        BASIN BOUNDARY FROM 1990 TOPO, MASTER DRAINAGE PLAN FOR WILDFLOWER
6368          KM        COMMUNITY DATED 4/96 BY KEOGH ENGINEERING, DRAINAGE REPORT FOR DESERT
6369          KM        EDGE HIGH SCHOOL DATED 12/13/00 BY KPFF CONSULTING ENGINEERS
6370          BA   0.606
6371          LG    0.42    0.25    4.80    0.43      14
6372          UI       0      42      42      75     126     231     230     313     324     349
6373          UI     349     335     292     307     249     231     194     159     122     124
6374          UI      95      72      64      52      46      38      39      25      24      23
6375          UI      24       7       6       5       5       5       6       5       5       5
6376          UI       5       6       5       5       5       5       6       5       5       0
              *

6377          KK  DS02REDIVERT
6378          KM        Drainage Report for Desert Edge High School, Remaining retention volume
6379          DT    RS02    21.2     0.0
6380          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6381          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6382          KK   CPS02COMBINE
6383          HC       2   0.874
              *

6384          KK   DS021DIVERT
6385          KM        Yuma at Estrella split flow
6386          DT  DS021S     0.0     0.0
6387          DI     0.0    26.4   184.9   540.1  1546.9     0.0     0.0     0.0     0.0     0.0
6388          DQ     0.0     5.3    79.0   220.3   670.4     0.0     0.0     0.0     0.0     0.0
```

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                *
6389            KK   DS022DIVERT
6390            KM        Yuma at Estrella split flow
6391            DT  DS022S     0.0     0.0
6392            DI     0.0    21.1   105.9   319.8   876.5     0.0     0.0     0.0     0.0     0.0
6393            DQ     0.0     9.9    42.9    88.9   144.9     0.0     0.0     0.0     0.0     0.0
                *

6394            KK  S02B67ROUTE
6395            KM        Cross-section: Estimated 3' deep and 4:1 side slopes
6396            KM        width based on aerial / Manning's N Value: clean straight
6397            KM        earth; earth with sparse trees and shrubs LOB and ROB
6398            RS       3    FLOW
6399            RC   0.032   0.022   0.032    1877  0.0021    0.00
6400            RX  100.00  120.00  140.00  148.00  152.00  160.00  168.00  176.00
6401            RY  972.50  972.30  972.00  970.00  970.10  972.00  972.30  972.50
                *

6402            KK     B67BASIN
6403            KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CENTERRA
6404            KM        DATED 11/20/00 BY PREMIER ENGINEERING CO.
6405            BA   0.328
6406            LG    0.35    0.26    4.80    0.39      22
6407            UI       0      30      54     123     162     198     246     355     339     262
1                                          HEC-1 INPUT                                                PAGE162

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

6408            UI     212     171     131      75      52      41      31      14      10       9
6409            UI       9      10       0       0       0       0       0       0       0       0
6410            UI       0       0       0       0       0       0       0       0       0       0
6411            UI       0       0       0       0       0       0       0       0       0       0
                *

6412            KK  DB67REDIVERT
6413            KM        Drainage Report for Centerra (50% retention volume used)
6414            DT    RB67    12.8     0.0
6415            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6416            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

6417            KK   DS012RETRIEVE
6418            DR  DS012S
                *

6419            KK  S01B67ROUTE
6420            KM        Cross-section: Ag field, assumed 0.5% side slopes
6421            KM        V-ditch / Manning's N Value: avg value for cultivated areas
6422            KM        from Estimated Manning's Roughness Coefficient for
6423            KM        Stream Channels and Flood Plains in MC
6424            RS      76    FLOW
6425            RC   0.038   0.038   0.038    5930  0.0035    0.00
6426            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6427            RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
                *

6428            KK   CPB67COMBINE
6429            HC       3   1.202
                *

6430            KK  B67B68ROUTE
6431            KM        Cross-section: Estimated based on aerial
6432            KM        Manning's N Value: clean straight earth
6433            RS       1    FLOW
6434            RC   0.022   0.022   0.022    1410  0.0085    0.00
6435            RX  100.00  110.00  120.00  132.00  144.00  156.00  166.00  176.00
6436            RY  968.50  968.30  968.00  965.00  965.10  968.00  968.30  968.50
                *

6437            KK     B68BASIN
6438            KM        BASIN BOUNDARY FROM 1990 TOPO AND DRAINAGE REPORT
6439            KM        FOR CENTERRA DATED 11/20/00 BY PREMIER ENGINEERING CO.
6440            BA   0.736
6441            LG    0.43    0.26    5.30    0.33       6
6442            UI       0      47      47      76     126     224     275     290     364     389
6443            UI     395     399     363     327     355     278     256     237     179     149
6444            UI     135     133      89      76      66      58      50      42      43      28
6445            UI      27      26      27      14       6       5       6       6       6       6
6446            UI       6       6       6       5       6       6       6       6       6       6
                *
1                                          HEC-1 INPUT                                                PAGE163

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

6447            KK  DB68REDIVERT
6448            KM        Drainage Report for Centerra (50% retention volume used)
6449            DT    RB68    12.8     0.0
6450            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6451            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

6452            KK   CPB68COMBINE
6453            HC       3  47.715
                *

6454            KK  B68B69ROUTE
6455            KM        Cross-section: Bullard Wash Improvement I-10 to Phase 1
6456            KM        Proposed CLOMR HEC-RAS model, Section 16366.6
6457            RS       2    FLOW
6458            RC   0.033   0.025   0.033    5518  0.0029    0.00
6459            RX  100.00  133.40  149.10  221.80  231.20  273.60  289.30  308.70
6460            RY  958.20  955.70  952.20  951.20  951.10  952.20  955.70  958.80
                *

6461            KK     B69BASIN
6462            KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
6463            BA   0.909
6464            LG    0.46    0.25    5.30    0.36       3
6465            UI       0      54      55      77     125     229     319     285     428     404
6466            UI     450     460     450     410     382     404     325     295     287     209
6467            UI     191     155     165     119      96      86      72      66      55      49
6468            UI      49      33      31      31      30      24       7       6       7       7
6469            UI       7       7       6       7       7       7       6       7       7       7
                *

6470            KK   DS022RETRIEVE
6471            DR  DS022S
                *
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6472        KK  S02B69ROUTE
6473        KM        Cross-section: Ag field, assumed 0.5%
6474        KM        side slopes, V-ditch / Manning's N Value: avg value
6475        KM        for cultivated areas from Estimated Manning's Roughness
6476        KM        Coefficient for Stream Channels and Flood Plains in MC
6477        RS      25    FLOW
6478        RC   0.038   0.038   0.038    6447  0.0043    0.00
6479        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6480        RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
            *

6481        KK   CPB69COMBINE
6482        HC       3  48.624
            *
```



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

6483        KK  B69B70ROUTE
6484        KM        As Built plans for Bullard Wash Imprv, FCD 4700731
6485        KM        8/2008, N Value: earth with sparse trees and shrubs
6486        RS       2    FLOW
6487        RC   0.035   0.022   0.035    4315  0.0012    0.00
6488        RX  100.00  115.00  121.00  127.00  207.00  211.00  215.00  225.00
6489        RY  942.00  937.00  935.00  933.00  932.90  935.00  937.00  942.00
            *

6490        KK     B85BASIN
6491        KM        BASIN BOUNDARY FROM 1990 TOPO
6492        BA   0.408
6493        LG    0.30    0.31    5.80    0.24      27
6494        UI       0      37      67     151     200     244     304     444     422     324
6495        UI     265     213     164      96      65      52      37      19      12      12
6496        UI      12      11       0       0       0       0       0       0       0       0
6497        UI       0       0       0       0       0       0       0       0       0       0
6498        UI       0       0       0       0       0       0       0       0       0       0
            *

6499        KK  DB85REDIVERT
6500        KM        Final Drainage Report for Central Marketplace, Drainage Report for
6501        KM        the Roomstore, Drainage Report for Palm Valley Condominiums
6502        KM        Drainage Report for Palm Valley Crossing Phase II, Remaining
6503        KM        retention volume estimated from aerial
6504        DT    RB85    11.9     0.0
6505        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6506        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

6507        KK  B85B86ROUTE
6508        KM        Cross-section: Estimated based on aerial
6509        KM        Manning's N Value: street and ROW
6510        RS       4    FLOW
6511        RC   0.022   0.016   0.022    5274  0.0030    0.00
6512        RX  100.00  120.00  141.00  143.00  226.00  228.00  248.00  269.00
6513        RY  1001.0 1000.50 1000.00  999.60  999.50 1000.00 1000.50 1001.00
            *

6514        KK     B86BASIN
6515        KM        BASIN BOUNDARY FROM 1990 TOPO
6516        BA   0.619
6517        LG    0.28    0.26    5.10    0.34      31
6518        UI       0      61     124     262     338     427     572     749     593     466
6519        UI     371     292     176     106      87      61      28      19      19      18
6520        UI      19       0       0       0       0       0       0       0       0       0
6521        UI       0       0       0       0       0       0       0       0       0       0
6522        UI       0       0       0       0       0       0       0       0       0       0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6523        KK  DB86REDIVERT
6524        KM        Retention volume estimated based on aerial
6525        DT    RB86     2.9     0.0
6526        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6527        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

6528        KK   CPB86COMBINE
6529        HC       2   1.027
            *

6530        KK  B86B89ROUTE
6531        KM        Cross-section: Estimated based on aerial
6532        KM        Manning's N Value: street and ROW
6533        RS       1    FLOW
6534        RC   0.022   0.016   0.022    4090  0.0024    0.00
6535        RX  100.00  111.00  121.00  123.00  206.00  208.00  220.00  240.00
6536        RY  1001.0  999.80  999.50  999.00  999.10  999.50  999.80 1001.00
            *

6537        KK     B87BASIN
6538        KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
6539        BA   0.273
6540        LG    0.19    0.26    5.20    0.32      47
6541        UI       0     121     374     675     512     271      96      36      20       0
6542        UI       0       0       0       0       0       0       0       0       0       0
6543        UI       0       0       0       0       0       0       0       0       0       0
6544        UI       0       0       0       0       0       0       0       0       0       0
6545        UI       0       0       0       0       0       0       0       0       0       0
            *

6546        KK  DB87REDIVERT
6547        KM        Retention volume estimated based on aerial
6548        DT    RB87     7.3     0.0
6549        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6550        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

6551        KK  B87B88ROUTE
6552        KM        Cross-section: Estimated based on aerial
6553        KM        Manning's N Value: street and ROW
6554        RS       6    FLOW
6555        RC   0.022   0.016   0.022    7579  0.0021    0.00
6556        RX  100.00  102.00  105.00  107.00  243.00  245.00  247.00  250.00
6557        RY  1001.0 1000.10 1000.00  999.50  999.60 1000.00 1000.10 1001.00
            *
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6558          KK     B88BASIN
6559          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
6560          BA   0.509
6561          LG    0.23     0.26     4.80     0.37       39
6562          UI       0       56      142      264      340      447      667      577      447      339
6563          UI     253      139       95       63       41       17       18       17       17        0
6564          UI       0        0        0        0        0        0        0        0        0        0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6565          UI       0        0        0        0        0        0        0        0        0        0
6566          UI       0        0        0        0        0        0        0        0        0        0
              *

6567          KK  DB88REDIVERT
6568          KM        Retention volume estimated based on aerial
6569          DT    RB88      7.5      0.0
6570          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6571          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6572          KK   CPB88COMBINE
6573          HC       2    0.782
              *

6574          KK  B88B89ROUTE
6575          KM        Cross-section: Estimated based on aerial
6576          KM        Manning's N Value: street and ROW
6577          RS       3     FLOW
6578          RC   0.022    0.016    0.022     5377   0.0019     0.00
6579          RX  100.00   111.00   121.00   123.00   206.00   208.00   220.00   240.00
6580          RY  1001.0   999.80   999.50   999.00   999.10   999.50   999.80  1001.00
              *

6581          KK     B89BASIN
6582          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FIELD VISIT. PONDS BEHIND
6583          KM        RAILROAD TRACKS AND SPILLS INTO PHOENIX-GOODYEAR AIRPORT
6584          BA   0.377
6585          LG    0.23     0.28     4.80     0.36       35
6586          UI       0       81      296      447      736      583      379      199       99       48
6587          UI      20       21        0        0        0        0        0        0        0        0
6588          UI       0        0        0        0        0        0        0        0        0        0
6589          UI       0        0        0        0        0        0        0        0        0        0
6590          UI       0        0        0        0        0        0        0        0        0        0
              *

6591          KK  DB89REDIVERT
6592          KM        Final Drainage Report for Goodyear Public Storage
6593          DT    RB89      1.0      0.0
6594          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6595          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6596          KK   CPB89COMBINE
6597          HC       3    2.186
              *

6598          KK   SRB89STORAGE
6599          KM        Storage at airport ramp (WLB)
6600          KO
6601          RS       1     STOR
6602          SV            0.06     3.14    15.08    45.28   110.59   221.78   290.44   449.81
6603          SQ           10.00   100.00   250.00   370.00   380.00   383.00   383.00  8928.00
6604          SE  951.30  952.00   954.00   956.00   958.00   960.00   962.00   962.80   964.00
6605          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6606          KK  DB89SWDIVERT
6607          KM        Divert flow from 96"" Storm Drain into Agua Fria River.
6608          DT  DB89SD      0.0      0.0
6609          DI     0.0     10.0    100.0    250.0    370.0    380.0    500.0    600.0   5000.0      0.0
6610          DQ     0.0     10.0    100.0    250.0    370.0    380.0    380.0    380.0    380.0      0.0
              *

6611          KK  B89B92ROUTE
6612          KM        Cross-section: Cross-section determined from 1991
6613          KM        topo and aerial / Manning's N Value: clean straight earth
6614          RS       1     FLOW
6615          RC   0.022    0.022    0.022     8019   0.0045     0.00
6616          RX  100.00   120.00   140.00   152.00   166.00   178.00   198.00   218.00
6617          RY  934.50   934.30   934.00   930.00   930.10   934.00   934.30   934.50
              *

6618          KK     B90BASIN
6619          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
6620          BA   0.455
6621          LG    0.46     0.25     4.80     0.45        7
6622          UI       0       41       55      115      235      252      334      344      353      294
6623          UI     311      220      209      150      122      105       72       59       48       38
6624          UI      34       23       23       18        5        5        5        6        5        5
6625          UI       5        5        6        5        5        5        5        0        0        0
6626          UI       0        0        0        0        0        0        0        0        0        0
              *

6627          KK  DB90REDIVERT
6628          KM        Drainage Report for Goodyear Industrial Park
6629          DT    RB90      1.3      0.0
6630          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6631          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6632          KK  B90B91ROUTE
6633          KM        Cross-section: Cross-section determined from 1991 topo
6634          KM        Manning's N Value: avg value for cultivated areas from
6635          KM        Estimated Manning's Roughness Coefficient for Stream
6636          KM        Channels and Flood Plains in MC
6637          RS      12     FLOW
6638          RC   0.038    0.038    0.038     5756   0.0030     0.00
6639          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
6640          RY  1078.0  1077.50  1076.50  1076.00  1076.30  1076.50  1077.50  1078.00
              *

6641          KK     B91BASIN
6642          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FINAL DRAINAGE REPORT FOR
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6643          KM        VENIDA BUSINESS PARK AT CROSSPOINTE PHASE 1
6644          BA   0.586
6645          LG    0.47    0.25    4.70    0.47       4
6646          UI       0      33      34      42      70     124     181     188     217     254
6647          UI     279     279     279     276     237     230     259     181     181     172
6648          UI     129     116      95     101      78      61      54      47      40      38
6649          UI      30      30      27      19      18      19      19      12       4       4
1                                          HEC-1 INPUT                                          PAGE168

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

6650          UI       4       5       4       4       4       4       4       5       4       4
              *

6651          KK  DB91REDIVERT
6652          KM        Final Drainage Report for Venida Business Park at
6653          KM        Crosspointe Phase I
6654          DT    RB91     3.7     0.0
6655          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6656          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6657          KK   CPB91COMBINE
6658          HC       2   1.041
              *

6659          KK  B91B92ROUTE
6660          KM        Cross-section: Cross-section determined from 1991 topo
6661          KM        Manning's N Value: clean straight earth
6662          RS       9    FLOW
6663          RC   0.022   0.022   0.022   12337  0.0033    0.00
6664          RX  100.00  150.00  190.00  230.00  290.00  350.00  370.00  390.00
6665          RY  956.50  956.30  956.00  954.00  954.10  956.00  957.00  958.00
              *

6666          KK     B92BASIN
6667          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
6668          KM        ROUTING FROM BULLARD WASH IMPROV PLANS
6669          BA   1.371
6670          LG    0.16    0.26    4.80    0.39      29
6671          UI       0     425    1422    2365    2978    1810     903     394     162      85
6672          UI       0       0       0       0       0       0       0       0       0       0
6673          UI       0       0       0       0       0       0       0       0       0       0
6674          UI       0       0       0       0       0       0       0       0       0       0
6675          UI       0       0       0       0       0       0       0       0       0       0
              *

6676          KK   CPB92COMBINE
6677          HC       3   4.598
              *

6678          KK  B92B70ROUTE
6679          KM        Cross-section: Cross-section determined from aerial
6680          KM        and 1991 topo / Manning's N Value: concrete channel
6681          RS       1    FLOW
6682          RC   0.016   0.016   0.016     115  0.0010    0.00
6683          RX  100.00  120.00  140.00  156.00  172.00  188.00  208.00  228.00
6684          RY  930.50  930.30  930.00  920.00  920.10  930.00  930.30  930.50
              *

6685          KK     B70BASIN
6686          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
6687          BA   0.110
6688          LG    0.33    0.25    5.10    0.37      15
6689          UI       0      12      20      50      72      95     101      96      87      72
6690          UI      62      43      36      24      18      14      11       9       7       6
1                                          HEC-1 INPUT                                          PAGE169

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

6691          UI       2       1       2       1       2       1       2       1       2       1
6692          UI       2       0       0       0       0       0       0       0       0       0
6693          UI       0       0       0       0       0       0       0       0       0       0
              *

6694          KK   CPB70COMBINE
6695          HC       3  53.332
              *

6696          KK  B70B93ROUTE
6697          KM        As Built plans for Bullard Wash Imprv, FCD 4700731
6698          KM        Aug-08
6699          RS       1    FLOW
6700          RC   0.035   0.022   0.035    1268  0.0012    0.00
6701          RX  100.00  110.00  114.00  118.00  198.00  202.00  206.00  216.00
6702          RY  920.00  915.00  913.00  911.00  910.90  913.00  915.00  920.00
              *

6703          KK     B93BASIN
6704          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
6705          BA   0.424
6706          LG    0.38    0.27    4.40    0.53      21
6707          UI       0      20      21      21      37      51      83     111     121     123
6708          UI     159     157     171     171     173     171     151     144     154     147
6709          UI     108     112     112      84      76      64      60      62      49      39
6710          UI      34      33      26      25      22      19      19      19      13      11
6711          UI      12      12      11      10       3       2       3       3       2       3
              *

6712          KK  DB93REDIVERT
6713          KM        Drainage Report for Goodyear 4 Industrial
6714          DT    RB93     0.6     0.0
6715          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6716          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6717          KK   CPB93COMBINE
6718          HC       2  53.756
              *

6719          KK  B93B94ROUTE
6720          KM        As Built plans for Bullard Wash Imprv, FCD 4700731
6721          KM        Aug-08
6722          RS       1    FLOW
6723          RC   0.035   0.022   0.035    3258  0.0015    0.00
6724          RX  100.00  115.00  121.00  127.00  207.00  211.00  215.00  225.00
6725          RY  918.00  913.00  911.00  909.00  908.90  911.00  913.00  918.00
              *

6726          KK     B94BASIN
```

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6727          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
6728          KM        FLOW ENTERS BUCKEYE CANAL
6729          BA   0.507
6730          LG    0.50     0.25     5.10     0.40        0
6731          UI       0       30       30       42       68      125      176      157      236      220
1                                          HEC-1 INPUT                                                          PAGE170

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

6732          UI     251      253      248      231      210      223      189      161      166      117
6733          UI     109       87       89       73       55       48       41       37       32       28
6734          UI      27       21       17       17       17       17        4        3        4        4
6735          UI       4        3        4        4        3        4        4        4        3        4
              *

6736          KK   CPB94COMBINE
6737          HC       2  54.263
              *

6738          KK   DUMMYCOMBINE
6739          HC       2
              *

6740          KK    B101BASIN
6741          KM        BASIN BOUNDARY FROM 1990 TOPO AND ADOT MAPPING
6742          KM        INCLUDING CULVERT LOCATIONS FROM I-10 WIDENING PROJECT
6743          BA   0.076
6744          LG    0.42     0.25     4.80     0.44       16
6745          UI       0       13       44       79      101       98       80       59       39       24
6746          UI      16       12        7        5        2        2        1        2        1        2
6747          UI       1        0        0        0        0        0        0        0        0        0
6748          UI       0        0        0        0        0        0        0        0        0        0
6749          UI       0        0        0        0        0        0        0        0        0        0
              *

6750          KK  SRB101STORAGE
6751          KM        Storage behind I-10
6752          KO
6753          RS       1     STOR
6754          SV            0.70     5.68     7.84    10.00
6755          SQ           16.00   227.00   435.00  1468.00
6756          SE  1005.5 1006.90 1009.50 1010.00 1011.00
6757          ST
              *

6758          KK   B101SROUTE
6759          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
6760          KM        width based on aerial / Manning's N Value: grass
6761          RS       5     FLOW
6762          RC   0.025    0.025    0.025     4663   0.0034     0.00
6763          RX  100.00   110.00   120.00   132.00   162.00   174.00   184.00   194.00
6764          RY  1006.5 1006.30 1006.00 1003.00 1003.10 1006.00 1006.30 1006.50
              *

6765          KK     S06BASIN
6766          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS UNIT 2 &
6767          KM        INFRASTRUCTURE DATED 7/20/02 BY CVL, DRAINAGE REPORT FOR CANYON TRAILS
6768          KM        UNIT 3A DATED 3/28/03 BY CVL, FINAL DRAINAGE REPORT FOR TRAVIS PARK AT
6769          KM        CANYON TRAILS PARCEL 3M1
6770          BA   0.390
6771          LG    0.29     0.28     4.80     0.33       18
6772          UI       0       91      323      492      802      582      377      173       95       39
6773          UI      21       21        0        0        0        0        0        0        0        0
6774          UI       0        0        0        0        0        0        0        0        0        0
1                                          HEC-1 INPUT                                                          PAGE171

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

6775          UI       0        0        0        0        0        0        0        0        0        0
6776          UI       0        0        0        0        0        0        0        0        0        0
              *

6777          KK  DS06REDIVERT
6778          KM        Borrow Pit (volume estimated from 1990 topo), Drainage Report
6779          KM        for Canyon Trails Unit 3A (portion of retention used), Final
6780          KM        Drainage Report for Travis Park at Canyon Trails Parcel 3M
6781          KM        (portion of retention used), Preliminary Drainage Report Arizona
6782          KM        Public Service Company Wildflower Substation, Drainage Report
6783          KM        or Verle Naber, Remaining retention volume estimated from aerial
6784          DT    RS06    643.5      0.0
6785          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6786          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6787          KK   CPS06COMBINE
6788          HC       2   0.466
              *

6789          KK  S06S07ROUTE
6790          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
6791          KM        width based on aerial / Manning's N Value: earth with
6792          KM        sparse trees and shrubs
6793          RS       9     FLOW
6794          RC   0.032    0.032    0.032     6891   0.0033     0.00
6795          RX  100.00   104.00   108.00   120.00   130.00   142.00   146.00   150.00
6796          RY  990.50   990.30   990.00   987.00   987.10   990.00   990.30   990.50
              *

6797          KK     S07BASIN
6798          KM        BASIN BOUNDARY FROM MASTER DRAINAGE PLAN
6799          KM        FOR WILDFLOWER COMMUNITY DATED 4/96 BY KEOGH ENGINEERING
6800          BA   0.423
6801          LG    0.25     0.26     4.70     0.37       31
6802          UI       0       62      240      359      518      741      509      363      227      106
6803          UI      70       30       19       19        0        0        0        0        0        0
6804          UI       0        0        0        0        0        0        0        0        0        0
6805          UI       0        0        0        0        0        0        0        0        0        0
6806          UI       0        0        0        0        0        0        0        0        0        0
              *

6807          KK  DS07REDIVERT
6808          KM        Master Drainage Plan Wildflower Community
6809          DT    RS07     37.3      0.0
6810          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6811          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6812          KK   CPS07COMBINE
6813          HC       2   0.889
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6814          KK  S07S08ROUTE
6815          KM        Cross-section: Estimated 3' deep and 4:1 side
6816          KM        slopes, width based on aerial / Manning's N Value
6817          KM        earth with sparse trees and shrubs
6818          RS       7    FLOW
6819          RC   0.032   0.032   0.032    5382  0.0039    0.00
6820          RX  100.00  102.00  104.00  116.00  126.00  138.00  158.00  178.00
6821          RY  952.50  952.30  952.00  949.00  949.10  952.00  952.30  952.50
              *

6822          KK     S08BASIN
6823          KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
6824          KM        A.THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
6825          KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
6826          KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE PH
6827          BA   0.267
6828          LG    0.25    0.26    4.65    0.38      30
6829          UI       0      60     216     326     533     406     265     130      67      30
6830          UI      15      15       0       0       0       0       0       0       0       0
6831          UI       0       0       0       0       0       0       0       0       0       0
6832          UI       0       0       0       0       0       0       0       0       0       0
6833          UI       0       0       0       0       0       0       0       0       0       0
              *

6834          KK  DS08REDIVERT
6835          KM        Drainage Design Report for Pueblo Verde (portion of retention
6836          KM        used), Remaining retention volume estimated from aerial
6837          DT    RS08    30.3     0.0
6838          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6839          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6840          KK   CPS08COMBINE
6841          HC       2   1.156
              *

6842          KK  S08S09ROUTE
6843          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
6844          KM        width based on aerial / Manning's N Value: clean straight earth
6845          RS       5    FLOW
6846          RC   0.022   0.022   0.022    5017  0.0080    0.00
6847          RX  100.00  102.00  104.00  116.00  136.00  148.00  158.00  166.00
6848          RY  936.50  936.30  936.00  933.00  933.10  936.00  936.30  936.50
              *

6849          KK     S09BASIN
6850          KM        BASIN BOUNDARY FROM DRAINAGE REPORT
6851          KM        FOR SARIVAL VILLAGE PARCEL 7 DATED 7/27/04 BY CMX
6852          BA   0.370
6853          LG    0.27    0.29    4.60    0.38      23
6854          UI       0     101     341     540     794     526     312     130      67      21
6855          UI      22       0       0       0       0       0       0       0       0       0
6856          UI       0       0       0       0       0       0       0       0       0       0
6857          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6858          UI       0       0       0       0       0       0       0       0       0       0
              *

6859          KK  DS09REDIVERT
6860          KM        Drainage Report for Sarival Village Parcel 7, Preliminary
6861          KM        Drainage Report Sarival Crossing Business Park, Drainage
6862          KM        Report for Gordon-Darby Goodyear, Drainage Report for
6863          KM        Parcel #500-06-314, Remaining retention volume
6864          KM        estimated from aerial
6865          DT    RS09    22.3     0.0
6866          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6867          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6868          KK   CPS09COMBINE
6869          HC       2   1.526
              *

6870          KK   SRS09STORAGE
6871          KM        Storage behind UPRR
6872          KO
6873          RS       1    STOR
6874          SV            6.00   20.90   43.80   78.60
6875          SQ                          750.00 3076.00
6876          SE  909.00  910.00  911.00  912.60  913.10
6877          ST
              *

6878          KK   DS091DIVERT
6879          KM        MC85/RR Tracks/Sarival split flow
6880          DT  DS091W     0.0     0.0
6881          DI     0.0   750.6  3075.7  7642.2 13750.8     0.0     0.0     0.0     0.0     0.0
6882          DQ     0.0   501.7  2037.5  5216.1  9516.4     0.0     0.0     0.0     0.0     0.0
              *

6883          KK   DS092DIVERT
6884          KM        MC85/RR Tracks/Sarival split flow
6885          DT  DS092W     0.0     0.0
6886          DI     0.0   248.9  1038.2  2426.1  4234.3     0.0     0.0     0.0     0.0     0.0
6887          DQ     0.0     1.9    27.9    69.2   121.4     0.0     0.0     0.0     0.0     0.0
              *

6888          KK  S09S23ROUTE
6889          KM        Cross-section: Ag field, assumed 0.5% side slopes
6890          KM        V-ditch / Manning's N Value: avg value for cultivated
6891          KM        areas from Estimated Manning's Roughness Coefficient
6892          KM        for Stream Channels and Flood Plains in MC
6893          RS       1    FLOW
6894          RC   0.038   0.038   0.038    2041  0.0002    0.00
6895          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6896          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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6897          KK     S21BASIN
6898          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
6899          BA   0.126
6900          LG    0.50     0.25     4.55     0.52        0
6901          UI       0        8        8       12       20       36       46       47       58       66
6902          UI      65       66       65       54       59       52       42       44       31       28
6903          UI      23       24       17       14       13        9       10        7        7        7
6904          UI       4        5        4        4        2        1        1        1        1        1
6905          UI       1        1        1        1        1        1        1        1        1        1
              *

6906          KK  DS21SEDIVERT
6907          KM        Converging basins at road, assume 50-50 split
6908          DT   DS21S      0.0      0.0
6909          DI     0.0    100.0    500.0   1000.0      0.0      0.0      0.0      0.0      0.0      0.0
6910          DQ     0.0     50.0    250.0    500.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6911          KK  S21S23ROUTE
6912          KM        Cross-section: Ag field, assumed 0.5% side slopes
6913          KM        V-ditch / Manning's N Value: avg value for cultivated
6914          KM        areas from Estimated Manning's Roughness Coefficient
6915          KM        for Stream Channels and Flood Plains in MC
6916          RS      22     FLOW
6917          RC   0.038    0.038    0.038     3328   0.0010     0.00
6918          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
6919          RY  1000.0   999.50   998.50   998.00   998.30   998.50   999.50  1000.00
              *

6920          KK     S22BASIN
6921          KM        BASIN BOUNDARY FROM DRAINAGE REPORT
6922          KM        FOR SARIVAL GARDENS DATED 11/1/99 BY CLOUSE ENGINEERING INC.
6923          BA   0.267
6924          LG    0.30     0.25     4.60     0.34        5
6925          UI       0       38      140      217      303      455      329      239      161       74
6926          UI      49       26       12       12       12        0        0        0        0        0
6927          UI       0        0        0        0        0        0        0        0        0        0
6928          UI       0        0        0        0        0        0        0        0        0        0
6929          UI       0        0        0        0        0        0        0        0        0        0
              *

6930          KK  DS22REDIVERT
6931          KM        Drainage Report for Sarival Gardens
6932          DT    RS22     11.8      0.0
6933          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6934          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6935          KK  S22S23ROUTE
6936          KM        Cross-section: Ag field, assumed 0.5% side slopes
6937          KM        V-ditch / Manning's N Value: avg value for cultivated
6938          KM        areas from Estimated Manning's Roughness Coefficient
6939          KM        for Stream Channels and Flood Plains in MC
6940          RS      16     FLOW
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6941          RC   0.038    0.038    0.038     5505   0.0065     0.00
6942          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
6943          RY  1000.0   999.50   998.50   998.00   998.30   998.50   999.50  1000.00
              *

6944          KK     S23BASIN
6945          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR ESTRELLA-INDUSTRIAL
6946          KM        PARK DATED 1/4/00 BY CVL AND MASTER DRAINAGE REPORT FOR GOODYEAR
6947          KM        CROSSING INDUSTRIAL PARK DATED 11/29/07 BY V3
6948          BA   1.029
6949          LG    0.41     0.25     4.50     0.47        4
6950          UI       0       95      132      282      539      632      748      797      799      670
6951          UI     682      521      438      328      286      208      156      122      101       88
6952          UI      64       54       54       22       12       12       12       12       12       12
6953          UI      12       12       12       12       12       12        0        0        0        0
6954          UI       0        0        0        0        0        0        0        0        0        0
              *

6955          KK  DS23REDIVERT
6956          KM        Master Drainage Report for Estrella - Industrial Park
6957          DT    RS23     55.9      0.0
6958          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6959          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6960          KK   CPS23COMBINE
6961          HC       4    2.948
              *

6962          KK   SRS23STORAGE
6963          KM        Storage behind UPRR (WLB)
6964          KO
6965          RS       1     STOR
6966          SV            0.04     0.10     0.12     0.26    58.75   156.65
6967          SQ           11.00    14.00    23.00   370.00 7710.0038388.00
6968          SE  904.40   905.20   905.50   906.00   908.10   910.00   911.20
6969          ST
              *

6970          KK  S23S24ROUTE
6971          KM        Cross-section: Ag field, assumed 0.5% side slopes
6972          KM        V-ditch / Manning's N Value: avg value for cultivated
6973          KM        areas from Estimated Manning's Roughness Coefficient
6974          KM        for Stream Channels and Flood Plains in MC
6975          RS      14     FLOW
6976          RC   0.038    0.038    0.038     2937   0.0027     0.00
6977          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
6978          RY  1000.0   999.50   998.50   998.00   998.30   998.50   999.50  1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6979          KK     S24BASIN
6980          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS BEHIND
6981          KM        BUCKEYE CANAL AND OVERTOPS
6982          BA   0.416
6983          LG    0.48     0.25     5.00     0.41        2
6984          UI       0       29       29       55       99      170      161      216      242      247
6985          UI     243      227      205      220      154      166      115      103       82       85
6986          UI      56       47       39       36       28       26       22       16       17       16
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6987          UI       8       4       4       3       4       4       3       4       3       4
6988          UI       4       3       4       4       3       4       4       0       0       0
              *

6989          KK     S03BASIN
6990          KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
6991          KM        A THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
6992          KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
6993          KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE
6994          KM        PHASE D DATED 1/4/02 BY CMX
6995          BA   0.719
6996          LG    0.28    0.25    4.80    0.37      31
6997          UI       0      58      69     207     279     338     396     491     705     651
6998          UI     522     446     360     295     226     133      99      86      58      44
6999          UI      18      18      17      18      18       0       0       0       0       0
7000          UI       0       0       0       0       0       0       0       0       0       0
7001          UI       0       0       0       0       0       0       0       0       0       0
              *

7002          KK  DS03REDIVERT
7003          KM        Master Drainage Study Estrella Vista Parcels A Through H
7004          KM        and Parcel 8, Drainage Design Report for Pueblo Verde
7005          KM        (portion of retention used), Drainage Report for Sarival Village
7006          KM        Parcel 2, Drainage Report for Sarival Village Parcel 4
7007          KM        Drainage Report for Sarival Village Parcel 5
7008          DT    RS03    55.0     0.0
7009          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7010          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7011          KK   DS021RETRIEVE
7012          DR  DS021S
              *

7013          KK  S02S03ROUTE
7014          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7015          KM        width based on aerial / Manning's N Value: clean straight earth
7016          RS       5    FLOW
7017          RC   0.022   0.022   0.022    5334  0.0037    0.00
7018          RX  100.00  114.00  128.00  140.00  150.00  162.00  182.00  202.00
7019          RY  970.50  970.30  970.00  967.00  967.10  970.00  970.10  970.20
              *
1                                          HEC-1 INPUT                                          PAGE177

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

7020          KK   CPS03COMBINE
7021          HC       2   1.593
              *

7022          KK  S03S04ROUTE
7023          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7024          KM        width based on aerial / Manning's N Value: earth
7025          KM        with sparse trees and shrubs
7026          RS      17    FLOW
7027          RC   0.032   0.032   0.032    5843  0.0065    0.00
7028          RX  100.00  120.00  140.00  210.00  470.00  482.00  492.00  502.00
7029          RY  918.00  917.80  917.50  916.00  916.10  918.00  918.20  918.30
              *

7030          KK     S04BASIN
7031          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR SARIVAL VILLAGE PHASE B1 AND
7032          KM        B2 DATED 10/3/01 BY CMX AND DRAINAGE REPORT FOR SARVIAL VILLAGE PARCEL 6
7033          KM        DATED 10/3/01 BY CMX
7034          BA   0.702
7035          LG    0.34    0.25    4.70    0.44      18
7036          UI       0      60      73     152     303     351     450     501     508     471
7037          UI     423     416     324     276     213     173     151     104      86      74
7038          UI      56      54      34      34      34      13       7       8       7       8
7039          UI       7       8       7       8       7       7       8       7       8       0
7040          UI       0       0       0       0       0       0       0       0       0       0
              *

7041          KK  DS04REDIVERT
7042          KM        Drainage Report for Sarival Village Parcel 6, Arizona Galvanizing
7043          KM        Drainage Report, Hydrologic and Hydraulics Report for Estrella
7044          KM        Crossings Business Park, Remaining retention volume estimated from aeria
7045          DT    RS04    26.7     0.0
7046          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7047          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7048          KK   CPS04COMBINE
7049          HC       2   2.295
              *

7050          KK   SRS04STORAGE
7051          KM        Storage behind UPRR (WLB)
7052          KO
7053          RS       1    STOR
7054          SV            0.08    8.33   14.16   23.37
7055          SQ           50.00  285.00  778.00 4586.00
7056          SE  908.50  910.10  914.00  915.00  916.00
7057          ST
              *
1                                          HEC-1 INPUT                                          PAGE178

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

7058          KK  S04S10ROUTE
7059          KM        Cross-section: Ag field, assumed 0.5% side slopes
7060          KM        V-ditch / Manning's N Value: avg value for cultivated
7061          KM        areas from Estimated Manning's Roughness Coefficient
7062          KM        for Stream Channels and Flood Plains in MC
7063          RS      14    FLOW
7064          RC   0.038   0.038   0.038    4699  0.0021    0.00
7065          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7066          RY 1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7067          KK   DS091RETRIEVE
7068          DR  DS091W
              *

7069          KK  S09S10ROUTE
7070          KM        Cross-section: Ag field, assumed 0.5% side slopes
7071          KM        V-ditch / Manning's N Value: avg value for cultivated
7072          KM        areas from Estimated Manning's Roughness Coefficient
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7073          KM        for Stream Channels and Flood Plains in MC
7074          RS       1    FLOW
7075          RC   0.038   0.038   0.038    2851  0.0007    0.00
7076          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7077          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7078          KK     S05BASIN
7079          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
7080          KM        AND TRAVELS WEST
7081          BA   0.212
7082          LG    0.48    0.25    4.90    0.43       5
7083          UI       0      13      13      19      30      55      75      71      98      99
7084          UI     107     109     106      94      90      99      69      71      64      47
7085          UI      43      36      39      25      21      19      16      16      11      12
7086          UI      11       7       7       8       7       3       2       1       2       2
7087          UI       1       2       1       2       2       1       2       1       2       2
              *

7088          KK  S05S10ROUTE
7089          KM        Cross-section: Ag field, assumed 0.5% side slopes
7090          KM        V-ditch / Manning's N Value: avg value for cultivated
7091          KM        areas from Estimated Manning's Roughness Coefficient
7092          KM        for Stream Channels and Flood Plains in MC
7093          RS      18    FLOW
7094          RC   0.038   0.038   0.038    5430  0.0015    0.00
7095          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7096          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                                    PAGE179

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

7097          KK     S10BASIN
7098          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
7099          KM        AND TRAVELS WEST
7100          BA   0.615
7101          LG    0.47    0.25    4.80    0.44       5
7102          UI       0      28      28      29      47      61     100     148     173     148
7103          UI     198     218     237     235     238     237     236     204     195     212
7104          UI     205     148     152     163     114     107      95      82      81      84
7105          UI      53      50      47      42      34      35      29      26      26      25
7106          UI      17      16      16      16      16      16       3       4       4       3
              *

7107          KK   CPS10COMBINE
7108          HC       4   4.648
              *

7109          KK  S10S24ROUTE
7110          KM        Cross-section: Ag field, assumed 0.5% side slopes
7111          KM        V-ditch / Manning's N Value: avg value for cultivated
7112          KM        areas from Estimated Manning's Roughness Coefficient
7113          KM        for Stream Channels and Flood Plains in MC
7114          RS       8    FLOW
7115          RC   0.038   0.038   0.038    2857  0.0014    0.00
7116          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7117          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7118          KK   DS092RETRIEVE
7119          DR  DS092W
              *

7120          KK  S09S24ROUTE
7121          KM        Cross-section: Ag field, assumed 0.5% side slopes
7122          KM        V-ditch / Manning's N Value: avg value for cultivated
7123          KM        areas from Estimated Manning's Roughness Coefficient
7124          KM        for Stream Channels and Flood Plains in MC
7125          RS       1    FLOW
7126          RC   0.038   0.038   0.038    4898  0.0018    0.00
7127          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7128          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7129          KK   CPS24COMBINE
7130          HC       4   6.486
              *

7131          KK  S24S25ROUTE
7132          KM        Cross-section: Ag field, assumed 0.5% side slopes
7133          KM        V-ditch / Manning's N Value: avg value for cultivated
7134          KM        areas from Estimated Manning's Roughness Coefficient
7135          KM        for Stream Channels and Flood Plains in MC
7136          RS      13    FLOW
7137          RC   0.038   0.038   0.038    5984  0.0020    0.00
7138          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1                                          HEC-1 INPUT                                                    PAGE180

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

7139          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7140          KK     W21BASIN
7141          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN,
7142          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2^ CI TOPO
7143          BA   0.221
7144          LG    0.35    0.35    4.35    0.40       0
7145          UI       0      52     208     346     379     281     173     106      67      39
7146          UI      26      10      10      10       0       0       0       0       0       0
7147          UI       0       0       0       0       0       0       0       0       0       0
7148          UI       0       0       0       0       0       0       0       0       0       0
7149          UI       0       0       0       0       0       0       0       0       0       0
              *

7150          KK  W21L50ROUTE
7151          KM        Cross-section: Estimated 3' deep, side slopes and width based on
7152          KM        aerial / Manning's N Value: natural desert wash w/ vegetation
7153          RS       5    FLOW
7154          RC   0.035   0.035   0.035    6272  0.0056    0.00
7155          RX  100.00  110.00  120.00  146.00  166.00  236.00  256.00  276.00
7156          RY  1138.5 1138.30 1138.00 1132.00 1132.10 1136.00 1136.30 1136.50
              *

7157          KK     L50BASIN
7158          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
7159          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
7160          BA   0.498
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7161          LG    0.35    0.35    4.15    0.44       0
7162          UI       0    .104     408     703     819     672     424     271     169     109
7163          UI      67      43      21      21      21       0       0       0       0       0
7164          UI       0       0       0       0       0       0       0       0       0       0
7165          UI       0       0       0       0       0       0       0       0       0       0
7166          UI       0       0       0       0       0       0       0       0       0       0
              *

7167          KK   CPL50COMBINE
7168          HC       2   0.719
              *

7169          KK  L50L51ROUTE
7170          KM        Cross-section: Cross-section determined from aerial
7171          KM        Manning's N Value: clean earth; straight, street ROB
7172          RS       2    FLOW
7173          RC   0.022   0.022   0.013    2654  0.0049    0.00
7174          RX  100.00  101.00  330.00  340.00  346.00  356.00  371.00  386.00
7175          RY  1126.5 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.50
              *

7176          KK     L51BASIN
7177          KM        BASIN BOUNDARY FROM COTTONWOOD ESTATES AND SAVANNAH
7178          BA   0.495
7179          LG    0.29    0.28    4.10    0.49      13
7180          UI       0      73     289     430     643     856     593     417     246     124
7181          UI      78      28      22      23       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE181

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

7182          UI       0       0       0       0       0       0       0       0       0       0
7183          UI       0       0       0       0       0       0       0       0       0       0
7184          UI       0       0       0       0       0       0       0       0       0       0
              *

7185          KK  DL51REDIVERT
7186          KM        Retention volume estimated based on aerial
7187          DT    RL51    18.8     0.0
7188          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7189          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7190          KK   DL461RETRIEVE
7191          DR  DL461S
              *

7192          KK  L46L51ROUTE
7193          KM        Cross-section: Cross-section determined from aerial
7194          KM        Manning's N Value: earth w/ sparse trees and brush
7195          RS       5    FLOW
7196          RC   0.032   0.032   0.032    5512  0.0045    0.00
7197          RX  100.00  105.00  110.00  130.00  150.00  170.00  190.00  210.00
7198          RY  1124.5 1124.30 1124.00 1120.00 1120.10 1124.00 1124.30 1124.50
              *

7199          KK   CPL51COMBINE
7200          HC       3   3.066
              *

7201          KK  L51L52ROUTE
7202          KM        Cross-section: Estimated 4:1 sideslopes, width based on
7203          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
7204          RS       1    FLOW
7205          RC   0.032   0.032   0.032    2644  0.0034    0.00
7206          RX  100.00  122.00  144.00  156.00  176.00  188.00  200.00  212.00
7207          RY  1117.5 1116.25 1116.00 1113.00 1113.10 1116.00 1116.25 1117.50
              *

7208          KK     L52BASIN
7209          KM        BASIN BOUNDARY FROM RUSSEL RANCH PHASE 1 AND PHASE 2
7210          BA   0.498
7211          LG    0.28    0.28    4.00    0.53      18
7212          UI       0      64     202     337     445     688     683     497     370     244
7213          UI     118      86      51      19      20      19       0       0       0       0
7214          UI       0       0       0       0       0       0       0       0       0       0
7215          UI       0       0       0       0       0       0       0       0       0       0
7216          UI       0       0       0       0       0       0       0       0       0       0
              *

7217          KK  DL52REDIVERT
7218          KM        Retention volume estimated based on aerial
7219          DT    RL52    23.3     0.0
7220          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7221          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE182

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

7222          KK   DL462RETRIEVE
7223          DR  DL462S
              *

7224          KK  L46L52ROUTE
7225          KM        Cross-section: Estimated 4:1 sideslopes, width based on
7226          KM        aerial, included wall / Manning's N Value: gravel
7227          RS       6    FLOW
7228          RC   0.023   0.023   0.023    7754  0.0044    0.00
7229          RX  100.00  102.00  107.00  122.00  134.00  149.00  154.00  154.10
7230          RY  1000.5 1000.00  998.00  996.00  996.10  998.00 1000.00 1000.50
              *

7231          KK   DL471RETRIEVE
7232          DR  DL471S
              *

7233          KK  L47L52ROUTE
7234          KM        Cross-section: Cross section estimated from aerial
7235          KM        Manning's N Value: clean earth; straight; street LOB
7236          RS      11    FLOW
7237          RC   0.016   0.022   0.022    5307  0.0038    0.00
7238          RX  100.00  132.00  138.00  144.00  148.00  152.00  156.00  160.00
7239          RY  1118.5 1118.00 1117.00 1116.00 1115.90 1117.00 1118.00 1118.50
              *

7240          KK   CPL52COMBINE
7241          HC       4   4.801
              *
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7242          KK   DL521DIVERT
7243          KM        Camelback at Citrus split flow
7244          DT  DL521S      0.0      0.0
7245          DI     0.0    349.6   1281.0   3821.5   7631.2      0.0      0.0      0.0      0.0      0.0
7246          DQ     0.0     29.6    306.8   1432.6   3229.3      0.0      0.0      0.0      0.0      0.0
              *

7247          KK   DL522DIVERT
7248          KM        Camelback at Citrus split flow
7249          DT  DL522S      0.0      0.0
7250          DI     0.0    320.1    974.2   2389.0   4401.9      0.0      0.0      0.0      0.0      0.0
7251          DQ     0.0     15.2     51.2     99.4    157.1      0.0      0.0      0.0      0.0      0.0
              *

7252          KK  L52L53ROUTE
7253          KM        Cross-section: Cross-section determined from aerial
7254          KM        Manning's N Value: clean earth; straight; street ROB
7255          RS       3    FLOW
7256          RC   0.022    0.022    0.016     5286   0.0045     0.00
7257          RX  100.00   220.00   240.00   246.00   256.00   262.00   274.00   286.00
7258          RY  1094.5 1093.00 1092.50 1092.00 1092.10 1094.00 1094.25 1094.50
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7259          KK     L53BASIN
7260          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND AG LAND
7261          BA   1.002
7262          LG    0.50     0.25     4.45     0.56        0
7263          UI       0       50       50       50       98      136      218      291      274      322
7264          UI     373      426      415      421      420      407      348      353      384      293
7265          UI     265      299      205      192      165      143      151      128       95       83
7266          UI      80       63       62       54       45       46       45       28       29       28
7267          UI      28       29       16        6        6        6        6        7        6        6
              *

7268          KK   DL472RETRIEVE
7269          DR  DL472S
              *

7270          KK  L47L53ROUTE
7271          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
7272          KM        Manning's N Value: avg value for cultivated areas
7273          RS       8    FLOW
7274          RC   0.038    0.038    0.038     7479   0.0064     0.00
7275          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
7276          RY  1000.0   999.50   998.50   998.00   998.30   998.50   999.50 1000.00
              *

7277          KK   DL481RETRIEVE
7278          DR  DL481S
              *

7279          KK  L48L53ROUTE
7280          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
7281          KM        Manning's N Value: Ag field
7282          RS      32    FLOW
7283          RC   0.038    0.038    0.038     5346   0.0041     0.00
7284          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
7285          RY  1000.0   999.50   998.50   998.00   998.30   998.50   999.50 1000.00
              *

7286          KK   CPL53COMBINE
7287          HC       4    7.803
              *

7288          KK   DL531DIVERT
7289          KM        Camelback at Cotton split flow
7290          DT  DL531S      0.0      0.0
7291          DI     0.0    351.4   1270.7   2947.6   5463.3      0.0      0.0      0.0      0.0      0.0
7292          DQ     0.0     10.3    376.9   1055.3   2049.3      0.0      0.0      0.0      0.0      0.0
              *

7293          KK   DL532DIVERT
7294          KM        Camelback at Cotton split flow
7295          DT  DL532S      0.0      0.0
7296          DI     0.0    341.1    893.8   1892.3   3414.0      0.0      0.0      0.0      0.0      0.0
7297          DQ     0.0      2.9     41.8    103.8    182.2      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7298          KK  L53L54ROUTE
7299          KM        Cross-section: Cross-section determined from aerial
7300          KM        Manning's N Value: natural wash with heavy vegetation
7301          RS       1    FLOW
7302          RC   0.045    0.045    0.045     2532   0.0039     0.00
7303          RX  100.00   105.00   110.00   115.10   135.00   141.00   148.00   175.00
7304          RY  1080.0 1078.00 1076.50 1075.00 1074.90 1076.50 1078.00 1080.00
              *

7305          KK   SRL54STORAGE
7306          KM        STORAGE THROUGH CAMELBACK BASIN AT NORTHWEST CORNER
7307          KM        CAMELBACK AND LOOP 303-DB237, MODEL REC-EWPLOUT, JULY 12, 2008
7308          KO
7309          RS       1    STOR
7310          SV            4.80     9.80    15.10    20.60    26.50    32.60
7311          SQ           45.00    91.00   136.00   182.00   222.00   257.00
7312          SE  1040.0 1041.00 1042.00 1043.00 1044.00 1045.00 1046.00
7313          ST
              *

7314          KK  L54L58ROUTE
7315          KM        Cross-section determined from Camelback CAR
7316          KM        model REC-EWP.OUT dated July 14, 2008, ~RLP8
7317          RS       2    FLOW
7318          RC   0.020    0.020    0.020     5306   0.0034     0.00
7319          RX  100.00   108.00   109.00   110.00   116.00   117.00   118.00   126.00
7320          RY   18.00    10.00    10.00    10.00    10.00    10.00    10.00    18.00
              *

7321          KK     L55BASIN
7322          KM        BASIN BOUNDARY FROM 1990 TOPO
7323          BA   0.497
7324          LG    0.44     0.25     4.00     0.63        1
```

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7325          UI       0      30      30      61     109     144     163     182     216     243
7326          UI     317     386     329     275     245     211     184     157     134      98
7327          UI      64      52      50      36      30      27      10       9       9       9
7328          UI       9      10       9       9       0       0       0       0       0       0
7329          UI       0       0       0       0       0       0       0       0       0       0
              *

7330          KK   DL551DIVERT
7331          KM        Indian School at Perryville split flow
7332          DT  DL551S     0.0     0.0
7333          DI     0.0   155.2  1033.7  2463.5  4920.4     0.0     0.0     0.0     0.0     0.0
7334          DQ     0.0     0.0    97.8   314.7   781.8     0.0     0.0     0.0     0.0     0.0
              *

7335          KK   DL552DIVERT
7336          KM        Indian School at Perryville split flow
7337          DT  DL552S     0.0     0.0
7338          DI     0.0   155.2   935.9  2148.8  4138.5     0.0     0.0     0.0     0.0     0.0
7339          DQ     0.0     7.9    34.4    71.2   115.9     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7340          KK  L55L56ROUTE
7341          KM        Cross-section: Estimated 3' depth,  4:1 sideslopes
7342          KM        width based on aerial / Manning's N Value
7343          KM        clean earth; straight; street  ROB
7344          RS       3    FLOW
7345          RC   0.022   0.022   0.016    5334  0.0051    0.00
7346          RX  100.00  120.00  140.00  152.00  172.00  184.00  204.00  224.00
7347          RY  1096.5 1096.30 1096.00 1093.00 1093.10 1096.00 1096.30 1096.50
              *

7348          KK     L56BASIN
7349          KM        SEDELLA
7350          BA   0.999
7351          LG    0.35    0.35    4.00    0.47       0
7352          UI       0     145     543     823    1171    1719    1229     877     575     262
7353          UI     176      87      44      44       0       0       0       0       0       0
7354          UI       0       0       0       0       0       0       0       0       0       0
7355          UI       0       0       0       0       0       0       0       0       0       0
7356          UI       0       0       0       0       0       0       0       0       0       0
              *

7357          KK  DL56REDIVERT
7358          KM        Retention volume estimated based on aerial
7359          DT    RL56    93.5     0.0
7360          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7361          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7362          KK   DL521RETRIEVE
7363          DR  DL521S
              *

7364          KK  L52L56ROUTE
7365          KM        Cross-section: Assumed v-ditch in ROW, widths based on aerials
7366          KM        Manning's N Value: clean earth; straight; street ROB
7367          RS       2    FLOW
7368          RC   0.016   0.022   0.022    5292  0.0051    0.00
7369          RX  100.00  112.00  122.00  128.00  134.00  140.00  152.00  164.00
7370          RY  1089.5 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1089.50
              *

7371          KK   CPL56COMBINE
7372          HC       3   6.297
              *

7373          KK   DL561DIVERT
7374          KM        Indian School at Citrus split flow
7375          DT  DL561S     0.0     0.0
7376          DI     0.0    74.1   987.7  4308.5  9171.0     0.0     0.0     0.0     0.0     0.0
7377          DQ     0.0     0.0   322.7  1829.1  4074.0     0.0     0.0     0.0     0.0     0.0
              *
```



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

7378          KK   DL562DIVERT
7379          KM        Indian School at Citrus split flow
7380          DT  DL562S     0.0     0.0
7381          DI     0.0    74.1   665.0  2479.3  5097.1     0.0     0.0     0.0     0.0     0.0
7382          DQ     0.0     1.7    15.7    37.0    63.6     0.0     0.0     0.0     0.0     0.0
              *

7383          KK  L56L57ROUTE
7384          KM        Cross-section: Estimated 2' depth, width and side slopes based on aerial
7385          KM        Manning's N Value: clean earth; straight; street ROB
7386          RS       3    FLOW
7387          RC   0.022   0.022   0.013    5299  0.0034    0.00
7388          RX  100.00  101.00  108.00  118.00  124.00  134.00  145.00  146.00
7389          RY  1080.6 1080.50 1080.00 1078.00 1078.10 1080.00 1080.50 1080.60
              *

7390          KK     L57BASIN
7391          KM        BASIN BOUNDARY FROM TALAVERDE ESTATES, LIBRARY PROP TRUST, TEN303
7392          BA   0.997
7393          LG    0.49    0.25    4.45    0.56       1
7394          UI       0      50      50      50     102     139     227     300     269     336
7395          UI     385     424     421     420     429     392     351     367     387     265
7396          UI     272     282     201     194     154     141     159     107      93      81
7397          UI      75      62      62      49      45      47      37      29      28      29
7398          UI      28      27       7       6       6       7       6       6       7       6
              *

7399          KK   DL522RETRIEVE
7400          DR  DL522S
              *

7401          KK  L52L57ROUTE
7402          KM        Cross-section: Estimated 1' deep and 4:1 side slopes
7403          KM        width based on aerial / Manning's N Value: clean earth; straight
7404          RS      23    FLOW
7405          RC   0.038   0.038   0.038    7451  0.0058    0.00
7406          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7407          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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7408          KK   DL531RETRIEVE
7409          DR  DL531S
              *

7410          KK  L53L57ROUTE
7411          KM        Cross-section: Cross section estimated from aerial
7412          KM        Manning's N Value: street  ROW and clean earth
7413          RS       3    FLOW
7414          RC   0.016   0.022   0.022    5274  0.0032    0.00
7415          RX  100.00  113.00  126.00  141.00  166.00  186.00  201.00  214.00
7416          RY  1077.0 1076.25 1076.00 1075.00 1075.10 1076.00 1076.25 1077.00
              *
1                                          HEC-1 INPUT                                                    PAGE187

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

7417          KK   CPL57COMBINE
7418          HC       4  10.296
              *

7419          KK   DL571DIVERT
7420          KM        Indian School at Cotton split flow
7421          DT  DL571S     0.0     0.0
7422          DI     0.0    60.8   404.7  1424.5  3101.9     0.0     0.0     0.0     0.0     0.0
7423          DQ     0.0     2.7    39.0   238.0   569.0     0.0     0.0     0.0     0.0     0.0
              *

7424          KK   DL572DIVERT
7425          KM        Indian School at Cotton split flow
7426          DT  DL572S     0.0     0.0
7427          DI     0.0    58.1   365.6  1186.5  2532.9     0.0     0.0     0.0     0.0     0.0
7428          DQ     0.0     2.7    17.6    39.4    66.5     0.0     0.0     0.0     0.0     0.0
              *

7429          KK  L57L58ROUTE
7430          KM        Cross-section: Width and side slopes estimated from topo
7431          KM        and aerial / Manning's N Value: clean earth; straight
7432          RS       1    FLOW
7433          RC   0.022   0.022   0.022    2016  0.0030    0.00
7434          RX  100.00  102.00  104.00  106.00  206.00  254.00  264.00  274.00
7435          RY  1061.0 1060.00 1059.50 1059.00 1059.50 1060.00 1060.25 1061.00
              *

7436          KK     L58BASIN
7437          KM        BASIN BOUNDARY FROM 1990 TOPO
7438          BA   0.443
7439          LG    0.47    0.25    4.60    0.50       6
7440          UI       0      27      28      40      66     122     159     153     207     216
7441          UI     228     228     227     193     194     200     141     158     117     103
7442          UI      83      77      73      52      43      38      34      29      25      25
7443          UI      18      15      16      15      13       3       4       3       3       4
7444          UI       3       4       3       3       4       3       4       3       3       4
              *

7445          KK   DL532RETRIEVE
7446          DR  DL532S
              *

7447          KK  L53L58ROUTE
7448          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
7449          KM        Manning's N Value: avg value for cultivated areas from
7450          KM        Estimated Manning's Roughness Coefficient for Stream
7451          KM        Channels and Flood Plains in MC
7452          RS      16    FLOW
7453          RC   0.038   0.038   0.038    5615  0.0045    0.00
7454          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7455          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                                    PAGE188

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

7456          KK   CPL58COMBINE
7457          HC       4  10.739
              *

7458          KK  L58L63ROUTE
7459          KM        Cross-section determined from Camelback CAR
7460          KM        model REC-EWP.OUT dated July 14, 2008, ~RLP9
7461          RS       1    FLOW
7462          RC   0.020   0.020   0.020    1423  0.0038    0.00
7463          RX  100.00  108.00  109.00  110.00  116.00  117.00  118.00  126.00
7464          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

7465          KK     L63BASIN
7466          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
7467          BA   0.089
7468          LG    0.47    0.25    4.55    0.52       7
7469          UI       0      12      25      63      83      97      92      85      64      46
7470          UI      35      23      16      13      10       6       5       2       1       2
7471          UI       1       2       1       2       1       1       0       0       0       0
7472          UI       0       0       0       0       0       0       0       0       0       0
7473          UI       0       0       0       0       0       0       0       0       0       0
              *

7474          KK   DL572RETRIEVE
7475          DR  DL572S
              *

7476          KK  L57L63ROUTE
7477          KM        Cross-section: Ag field, assumed 0.5% side slopes
7478          KM        V-ditch / Manning's N Value: avg value for cultivated
7479          KM        areas from Estimated Manning's Roughness Coefficient
7480          KM        for Stream Channels and Flood Plains in MC
7481          RS       6    FLOW
7482          RC   0.038   0.038   0.038    2225  0.0054    0.00
7483          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7484          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7485          KK   CPL63COMBINE
7486          HC       3  10.828
              *

7487          KK  L63L64ROUTE
7488          KM        Cross-section determined from Camelback CAR
```

```
7489          KM        model REC-EWP.OUT dated July 14, 2008, ~RLP9
7490          RS       1    FLOW
7491          RC   0.020   0.020   0.020    4081  0.0038    0.00
7492          RX  100.00  108.00  109.00  110.00  116.00  117.00  118.00  126.00
7493          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *
1                                        HEC-1 INPUT                                                    PAGE189

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


7494          KK     L64BASIN
7495          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
7496          BA   0.196
7497          LG    0.45    0.25    4.50    0.54      13
7498          UI       0      15      15      34      65      88     104     118     129     127
7499          UI     117     110     105      81      78      58      45      47      29      24
7500          UI      21      18      14      14       9       8       9       6       2       2
7501          UI       2       2       1       2       2       2       2       2       2       2
7502          UI       2       2       2       0       0       0       0       0       0       0
              *

7503          KK   CPL64COMBINE
7504          HC       2  11.024
              *

7505          KK  L64L67ROUTE
7506          KM        Cross-section determined from Camelback CAR
7507          KM        model REC-EWP.OUT dated July 14, 2008, ~RLP10
7508          RS       1    FLOW
7509          RC   0.020   0.020   0.020    4621  0.0032    0.00
7510          RX  100.00  108.00  109.00  110.00  118.00  119.00  120.00  128.00
7511          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

7512          KK     L67BASIN
7513          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
7514          BA   0.101
7515          LG    0.43    0.25    4.65    0.48      17
7516          UI       0       7       7      12      20      37      39      52      52      57
7517          UI      57      57      48      50      43      38      34      26      22      20
7518          UI      17      13      11       8       8       7       6       5       4       4
7519          UI       3       2       1       1       1       1       1       1       1       0
7520          UI       1       1       1       1       1       1       1       0       1       0
              *

7521          KK   CPL67COMBINE
7522          HC       2  11.125
              *

7523          KK  L67L68ROUTE
7524          KM        Cross-section determined from Camelback CAR
7525          KM        model REC-EWP.OUT dated July 14, 2008, ~RLP10
7526          RS       1    FLOW
7527          RC   0.020   0.020   0.020     802  0.0032    0.00
7528          RX  100.00  108.00  109.00  110.00  118.00  119.00  120.00  128.00
7529          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

7530          KK     L60BASIN
7531          KM        BASIN BOUNDARY FROM 1990 TOPO
7532          BA   1.004
7533          LG    0.49    0.25    4.00    0.70       0
7534          UI       0      52      52      54     109     155     253     313     283     405
7535          UI     381     442     439     436     444     376     364     396     336     275
1                                        HEC-1 INPUT                                                    PAGE190

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

7536          UI     310     225     200     175     148     159     126      97      85      80
7537          UI      64      64      51      48      47      38      29      30      29      30
7538          UI      21       7       6       7       7       6       7       6       7       6
              *

7539          KK   DL552RETRIEVE
7540          DR  DL552S
              *

7541          KK  L55L60ROUTE
7542          KM        Cross-section: Ag field, assumed 0.5% side slopes
7543          KM        V-ditch / Manning's N Value: avg value for cultivated
7544          KM        areas from Estimated Manning's Roughness Coefficient
7545          KM        for Stream Channels and Flood Plains in MC
7546          RS      29    FLOW
7547          RC   0.038   0.038   0.038    7477  0.0072    0.00
7548          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7549          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7550          KK   DL561RETRIEVE
7551          DR  DL561S
              *

7552          KK  L56L60ROUTE
7553          KM        Cross-section: Ag field, assumed 0.5% side slopes
7554          KM        V-ditch / Manning's N Value: avg value for cultivated
7555          KM        areas from Estimated Manning's Roughness Coefficient
7556          KM        for Stream Channels and Flood Plains in MC
7557          RS      13    FLOW
7558          RC   0.038   0.038   0.038    5317  0.0049    0.00
7559          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7560          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7561          KK   CPL60COMBINE
7562          HC       3   7.301
              *

7563          KK   DL601DIVERT
7564          KM        Thomas at Citrus split flow
7565          DT  DL601S     0.0     0.0
7566          DI     0.0    67.0   791.7  2066.5  4118.1     0.0     0.0     0.0     0.0     0.0
7567          DQ     0.0    36.8   382.7   978.6  1804.2     0.0     0.0     0.0     0.0     0.0
              *

7568          KK   DL602DIVERT
7569          KM        Thomas at Citrus split flow
7570          DT  DL602S     0.0     0.0
7571          DI     0.0    30.3   409.0  1087.9  2314.0     0.0     0.0     0.0     0.0     0.0
7572          DQ     0.0     8.1    52.7   118.3   199.5     0.0     0.0     0.0     0.0     0.0
```

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

7573            KK  L60L61ROUTE
7574            KM        Cross-section: Ag field, assumed 0.5% side slopes
7575            KM        V-ditch / Manning's N Value: avg value for cultivated
7576            KM        areas from Estimated Manning's Roughness Coefficient
7577            KM        for Stream Channels and Flood Plains in MC
7578            RS       7    FLOW
7579            RC   0.038   0.038   0.038    2719  0.0022    0.00
7580            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7581            RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
                *

7582            KK     L61BASIN
7583            KM        BASIN BOUNDARY FROM 1990 TOPO
7584            BA   0.510
7585            LG    0.50    0.25    4.30    0.61       0
7586            UI       0      29      30      40      64     120     169     160     216     222
7587            UI     247     251     248     236     210     217     203     156     173     123
7588            UI     114      91      83      87      56      49      46      36      36      28
7589            UI      26      26      17      17      17      17      11       4       4       4
7590            UI       3       4       4       3       4       4       3       4       4       3
                *

7591            KK   DL562RETRIEVE
7592            DR  DL562S
                *

7593            KK  L56L61ROUTE
7594            KM        Cross-section: Ag field, assumed 0.5%
7595            KM        side slopes, V-ditch / Manning's N Value: avg value
7596            KM        for cultivated areas from Estimated Manning's Roughness
7597            KM        Coefficient for Stream Channels and Flood Plains in MC
7598            RS      29    FLOW
7599            RC   0.038   0.038   0.038    5938  0.0056    0.00
7600            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7601            RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
                *

7602            KK   CPL61COMBINE
7603            HC       3   7.811
                *

7604            KK  DL61SEDIVERT
7605            KM        Thomas at ag road split flow
7606            DT   DL61S     0.0     0.0
7607            DI     0.0   496.7  1797.8  4333.9  7784.2     0.0     0.0     0.0     0.0     0.0
7608            DQ     0.0   322.8  1118.2  2702.6  4870.5     0.0     0.0     0.0     0.0     0.0
                *

7609            KK  L61L62ROUTE
7610            KM        Cross-section: Ag field, assumed 0.5% side slopes
7611            KM        V-ditch / Manning's N Value: avg value for cultivated
7612            KM        areas from Estimated Manning's Roughness Coefficient
7613            KM        for Stream Channels and Flood Plains in MC
7614            RS       5    FLOW
```



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

7615            RC   0.038   0.038   0.038    2568  0.0031    0.00
7616            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7617            RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
                *

7618            KK     L62BASIN
7619            KM        BASIN BOUNDARY FROM 1990 TOPO
7620            BA   0.494
7621            LG    0.50    0.25    4.55    0.52       0
7622            UI       0      29      30      42      67     123     172     154     233     215
7623            UI     248     247     244     222     208     217     180     158     159     115
7624            UI     104      85      88      67      53      47      39      37      30      26
7625            UI      27      19      17      16      17      15       3       4       4       3
7626            UI       4       4       3       4       4       3       4       4       4       3
                *

7627            KK   DL571RETRIEVE
7628            DR  DL571S
                *

7629            KK  L57L62ROUTE
7630            KM        Cross-section: Estimated side slopes and width
7631            KM        based on aerial and topo / Manning's N Value:
7632            KM        natural wash w/ heavy vegetation
7633            RS       5    FLOW
7634            RC   0.045   0.045   0.045    5320  0.0043    0.00
7635            RX  100.00  110.00  120.00  130.00  140.00  150.00  170.00  190.00
7636            RY  1050.5 1050.30 1050.00 1047.00 1047.10 1050.00 1050.30 1050.50
                *

7637            KK   CPL62COMBINE
7638            HC       3  12.304
                *

7639            KK  L62L68ROUTE
7640            KM        Cross-section: Estimated side slopes and width
7641            KM        based on aerial and topo / Manning's N Value:
7642            KM        natural wash w/ heavy vegetation
7643            RS       4    FLOW
7644            RC   0.045   0.045   0.045    5299  0.0045    0.00
7645            RX  100.00  110.00  120.00  130.00  140.00  150.00  170.00  190.00
7646            RY  1050.5 1050.25 1050.00 1047.00 1047.10 1049.00 1050.25 1050.50
                *

7647            KK   DL602RETRIEVE
7648            DR  DL602S
                *

7649            KK  L60L68ROUTE
7650            KM        Cross-section: Ag field, assumed 0.5% side slopes
7651            KM        V-ditch / Manning's N Value: avg value for cultivated
7652            KM        areas from Estimated Manning's Roughness Coefficient
7653            KM        for Stream Channels and Flood Plains in MC
7654            RS      35    FLOW
7655            RC   0.038   0.038   0.038    9173  0.0043    0.00
```

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

7656          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7657          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

7658          KK  DL61SERETRIEVE
7659          DR   DL61S
              *

7660          KK  L61L68ROUTE
7661          KM        Cross-section: Assumed 3' depth V-Ditch, width based
7662          KM        aerial / Manning's N Value: clean earth; straight
7663          RS       3    FLOW
7664          RC   0.022   0.022   0.022    7340  0.0044    0.00
7665          RX  100.00  120.00  140.00  148.00  150.00  158.00  178.00  198.00
7666          RY  1040.5 1040.30 1040.00 1037.00 1037.10 1040.00 1040.30 1040.50
              *

7667          KK     L68BASIN
7668          KM        BASIN BOUNDARY FROM L303 AS-BUILT
7669          KM        AND DETAILED L303 1' CI TOPO, DETENTION FACILITY
7670          BA   1.000
7671          LG   0.22    0.25    4.40    0.55      17
7672          UI      0      95     136     302     539     660     746     793     779     674
7673          UI    625     541     376     299     276     174     143     118      88      80
7674          UI     55      54      40      12      12      12      12      11      12      12
7675          UI     12      12      12      12      12       0       0       0       0       0
7676          UI      0       0       0       0       0       0       0       0       0       0
              *

7677          KK   CPL68COMBINE
7678          HC       5  14.133
              *

7679          KK     W28BASIN
7680          KM        BASIN BOUNDARY FROM 1990 TOPO, BEAUTIFUL AZ ESTATES
7681          BA   0.350
7682          LG   0.35    0.35    4.30    0.41       0
7683          UI      0     115     458     697     609     363     204     117      66      36
7684          UI     18      18       0       0       0       0       0       0       0       0
7685          UI      0       0       0       0       0       0       0       0       0       0
7686          UI      0       0       0       0       0       0       0       0       0       0
7687          UI      0       0       0       0       0       0       0       0       0       0
              *

7688          KK  DW28REDIVERT
7689          KM        Preliminary Drainage Report for Jackrabbit Estates
7690          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
7691          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
7692          DT    RW28     7.2     0.0
7693          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7694          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE194

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

7695          KK  W28W29ROUTE
7696          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
7697          KM        width based on aerial / Manning's N Value: earth
7698          KM        w/ sparse trees and shrubs
7699          RS      10    FLOW
7700          RC   0.032   0.032   0.032    6604  0.0035    0.00
7701          RX  100.00  118.00  136.00  144.00  152.00  160.00  180.00  400.00
7702          RY  1148.5 1148.25 1148.00 1146.00 1146.10 1147.00 1147.10 1148.50
              *

7703          KK     W29BASIN
7704          KM        BASIN BOUNDARY FROM 1990 TOPO, JACKRABBIT ESTATES
7705          BA   0.640
7706          LG   0.34    0.32    4.10    0.46       1
7707          UI      0      86     285     557     767     833     720     514     364     252
7708          UI    178     125      87      59      41      21      21      21      21       0
7709          UI      0       0       0       0       0       0       0       0       0       0
7710          UI      0       0       0       0       0       0       0       0       0       0
7711          UI      0       0       0       0       0       0       0       0       0       0
              *

7712          KK  DW29REDIVERT
7713          KM        Preliminary Drainage Report for Jackrabbit Estates
7714          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
7715          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
7716          DT    RW29    10.8     0.0
7717          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7718          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7719          KK   CPW29COMBINE
7720          HC       2    0.99
              *

7721          KK  W29W30ROUTE
7722          KM        Cross-section: Estimated 1.5' deep and 4:1 side slopes
7723          KM        width based on aerial / Manning's N Value: clean straight earth
7724          RS       1    FLOW
7725          RC   0.022   0.022   0.022    2938  0.0068    0.00
7726          RX  100.00  102.00  104.00  116.00  122.00  134.00  144.00  150.00
7727          RY  1117.2 1116.10 1116.00 1114.50 1114.60 1116.00 1116.10 1117.20
              *

7728          KK     W30BASIN
7729          KM        BASIN BOUNDARY FROM 1990 TOPO
7730          BA   0.266
7731          LG   0.31    0.28    4.30    0.41       4
7732          UI      0      72     250     392     573     376     221      91      47      15
7733          UI     16       0       0       0       0       0       0       0       0       0
7734          UI      0       0       0       0       0       0       0       0       0       0
7735          UI      0       0       0       0       0       0       0       0       0       0
7736          UI      0       0       0       0       0       0       0       0       0       0
              *
1                                        HEC-1 INPUT                                          PAGE195

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

7737          KK   CPW30COMBINE
7738          HC       2   1.256
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KK  W30L59ROUTE
KM        Cross-section: Width and side slopes based on aerial
KM        and topo / Manning's N Value: earth w/ sparse trees and shrubs
RS       1    FLOW
RC   0.032   0.032   0.032    2996  0.0087    0.00
RX  100.00  115.00  130.00  170.00  194.00  234.00  254.00  274.00
RY  1095.0 1094.50 1094.00 1092.00 1092.10 1094.00 1094.30 1094.50
*

KK     L59BASIN
KM        BASIN BOUNDARY FROM LITCHFIELD FARMS
BA   0.502
LG    0.30     0.25     4.00     0.47        5
UI       0       65      214      353      463      742      671      490      363      224
UI     113       80       42       20       20       20        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  DL59REDIVERT
KM        Retention volume estimated based on aerial
DT    RL59     37.6      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK   DL551RETRIEVE
DR  DL551S
*

KK  L55L59ROUTE
KM        Cross-section: Assumed 2' depth, width based on
KM        aerial, wall included / Manning's N Value:
KM        earth w/ sparse trees and brush; street LOB
RS      14    FLOW
RC   0.016   0.032   0.032    5728  0.0038    0.00
RX  100.00  112.00  124.00  132.00  138.00  146.00  148.00  150.00
RY  1104.5 1104.30 1104.00 1102.00 1102.10 1104.00 1104.30 1105.00
*

KK   CPL59COMBINE
HC       3   2.255
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  L59L65ROUTE
KM        Cross-section: Assumed 3' depth, width based on aerial
KM        Manning's N Value: earth w/ sparse trees and brush
RS       3    FLOW
RC   0.032   0.032   0.032    6594  0.0067    0.00
RX  100.00  115.00  130.00  146.00  154.00  170.00  190.00  210.00
RY  1074.5 1074.30 1074.00 1071.00 1071.10 1074.00 1074.30 1074.50
*

KK     W31BASIN
KM        BASIN BOUNDARY FROM 1990 TOPO
BA   0.233
LG    0.31     0.28     4.00     0.47        6
UI       0       57      199      303      488      344      218       96       53       20
UI      13        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  W31W32ROUTE
KM        Cross-section: Side slopes and width based
KM        on aerial and topo / Manning's N Value:
KM        earth w/ sparse trees and shrubs
RS       3    FLOW
RC   0.032   0.032   0.032    6659  0.0070    0.00
RX  100.00  115.00  130.00  146.00  162.00  178.00  198.00  218.00
RY  1090.5 1090.30 1090.00 1087.00 1087.10 1090.00 1090.30 1090.50
*

KK     W32BASIN
KM        BASIN BOUNDARY FROM 1990 TOPO
BA   0.613
LG    0.31     0.27     4.10     0.50       10
UI       0       52       72      185      290      385      457      494      498      455
UI     372      301      239      194      152      123       99       81       59       53
UI      36       36       25       13       13       12       13       13       12        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK   CPW32COMBINE
HC       2   0.846
*

KK  W32L65ROUTE
KM        Cross-section determined from EX_SPLIT.DAT
KM        model received on May 6, 2009 from PB,
KM        191st Ave to Perryville Road-R10W1
RS       1    FLOW
RC   0.030   0.030   0.030    1714  0.0042    0.00
RX    0.00   34.20   39.20   44.20   49.20   54.20   59.20   93.40
RY  1045.4 1039.70 1039.70 1039.70 1039.70 1039.70 1039.70 1045.40
*
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1 HEC-1 INPUT PAGE197

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

KK     L65BASIN
KM        BASIN BOUNDARY FROM 1990 TOPO
BA   0.545
LG    0.42     0.27     4.10     0.63        6
UI       0       40       41       82      160      235      242      314      345      338
UI     334      286      300      237      233      169      144      118      114       76
UI      66       52       47       38       37       24       23       23       19        5
UI       5        5        5        5        5        5        5        5        6        5
UI       5        5        5        5        5        0        0        0        0        0
*
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7824          KK   CPL65COMBINE
7825          HC       3   3.646
              *

7826          KK  L65L69ROUTE
7827          KM        Cross-section: Determined from EX_SPLIT.DAT model received on
7828          KM        May 6, 2009 from PB, Perryvile Rd to 185th Ave-R10W2
7829          RS       1    FLOW
7830          RC   0.030   0.030   0.030    1615  0.0042    0.00
7831          RX    0.00   34.20   39.80   44.80   49.80   54.80   59.80   94.60
7832          RY  1045.4 1039.70 1039.70 1039.70 1039.70 1039.70 1039.70 1045.40
              *

7833          KK     L69BASIN
7834          KM        Bounryar based on I-10 W Diversion Channel plan
7835          KM        and EX.SPLIT.OUT HEC-1 model prepared by PB
7836          BA   0.058
7837          LG    0.14    0.25    4.15    0.60      61
7838          UI       0     106     257      73      11       0       0       0       0       0
7839          UI       0       0       0       0       0       0       0       0       0       0
7840          UI       0       0       0       0       0       0       0       0       0       0
7841          UI       0       0       0       0       0       0       0       0       0       0
7842          UI       0       0       0       0       0       0       0       0       0       0
              *

7843          KK   CPL69COMBINE
7844          HC       2   3.704
              *

7845          KK  L69L70ROUTE
7846          KM        Cross-section: Determined from EX_SPLIT.DAT model received on
7847          KM        May 6, 2009 from PB, 185th Ave to 183rd Ave-R10W3
7848          RS       1    FLOW
7849          RC   0.030   0.030   0.030    1041  0.0036    0.00
7850          RX    0.00   37.80   44.80   51.80   58.80   65.80   72.80  110.60
7851          RY  1021.2 1014.90 1014.90 1014.90 1014.90 1014.90 1017.90 1021.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7852          KK     L70BASIN
7853          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERTS LOCATIONS
7854          BA   0.048
7855          LG    0.15    0.25    4.45    0.50      59
7856          UI       0     124     215      28       0       0       0       0       0       0
7857          UI       0       0       0       0       0       0       0       0       0       0
7858          UI       0       0       0       0       0       0       0       0       0       0
7859          UI       0       0       0       0       0       0       0       0       0       0
7860          UI       0       0       0       0       0       0       0       0       0       0
              *

7861          KK   CPL70COMBINE
7862          HC       2   3.752
              *

7863          KK  L70L71ROUTE
7864          KM        Cross-section: Determined from EX_SPLIT.DAT model received
7865          KM        May 6, 2009 from PB, 183th Ave to Citrus Rd-R10W4
7866          RS       2    FLOW
7867          RC   0.015   0.015   0.015    2645  0.0036    0.00
7868          RX    0.00   10.00   20.00   32.00   44.00   56.00   66.00   76.00
7869          RY  1021.0 1021.00 1021.00 1015.00 1021.00 1021.00 1021.00 1021.00
              *

7870          KK     L66BASIN
7871          KM        BASIN BOUNDARY FROM 1990 TOPO
7872          BA   0.998
7873          LG    0.44    0.25    4.45    0.55       4
7874          UI       0      47      47      47      82     108     180     244     288     261
7875          UI     372     338     394     393     393     394     373     331     326     357
7876          UI     295     247     271     226     180     170     141     130     150      97
7877          UI      87      75      74      58      58      51      42      43      43      29
7878          UI      26      27      27      26      26       6       6       6       6       5
              *

7879          KK   DL601RETRIEVE
7880          DR  DL601S
              *

7881          KK  L60L66ROUTE
7882          KM        Cross-section: Ag field, assumed 0.5% side slopes
7883          KM        V-ditch / Manning's N Value: avg value for cultivated
7884          KM        areas from Estimated Manning's Roughness Coefficient
7885          KM        for Stream Channels and Flood Plains in MC
7886          RS       9    FLOW
7887          RC   0.038   0.038   0.038    5281  0.0053    0.00
7888          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7889          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
```



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

7890          KK   CPL66COMBINE
7891          HC       2   8.299
              *

7892          KK  L66L71ROUTE
7893          KM        Cross-section: assumed 3' depth, width based on aerial
7894          KM        Manning's N Value: clean earth; straight; street LOB
7895          RS       1    FLOW
7896          RC   0.016   0.022   0.022    1163  0.0043    0.00
7897          RX  100.00  108.00  116.00  124.00  130.00  138.00  158.00  178.00
7898          RY  1027.0 1026.10 1026.00 1024.00 1024.40 1026.00 1026.25 1027.00
              *

7899          KK     L71BASIN
7900          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
7901          BA   0.108
7902          LG    0.19    0.25    4.65    0.41      49
7903          UI       0     100     318     285      99      24       0       0       0       0
7904          UI       0       0       0       0       0       0       0       0       0       0
7905          UI       0       0       0       0       0       0       0       0       0       0
7906          UI       0       0       0       0       0       0       0       0       0       0
7907          UI       0       0       0       0       0       0       0       0       0       0
              *
```

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7908          KK  DL71REDIVERT
7909          KM        Arizona Storage Preliminary Drainage Report
7910          DT    RL71      1.4      0.0
7911          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7912          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7913          KK   CPL71COMBINE
7914          HC       3  11.662
              *

7915          KK     L72BASIN
7916          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
7917          KM        DRAINING TO CULVERT UNDER I-10
7918          BA   0.215
7919          LG    0.10     0.25     4.55     0.47       86
7920          UI       0       95      295      531      404      213       76       28       16        0
7921          UI       0        0        0        0        0        0        0        0        0        0
7922          UI       0        0        0        0        0        0        0        0        0        0
7923          UI       0        0        0        0        0        0        0        0        0        0
7924          UI       0        0        0        0        0        0        0        0        0        0
              *

7925          KK  DL72REDIVERT
7926          KM        Retention volume estimated based on aerial
7927          DT    RL72      4.4      0.0
7928          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7929          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
1                                          HEC-1 INPUT                                                    PAGE200

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

7930          KK   CPL72COMBINE
7931          HC       3  18.709
              *

7932          KK   SRL72STORAGE
7933          KM        STORAGE AT NORTHWEST CORNER OF 1-10 AND LOOP 303-SRLP12,
7934          KM        EX_SPLIT.DAT MODEL PROVIDED BY PB MAY 6, 2009
7935          KO
7936          RS       1    STOR
7937          SV            3.55    24.30    76.37   171.99   295.08   364.38   614.90   927.24  1037.27
7938          SQ            9.50    63.70    82.80   202.10   340.10   384.00   468.90   542.80   565.50
7939          SE  1003.0 1004.00 1006.00 1008.00 1010.00 1012.00 1013.00 1016.00 1019.00 1020.00
7940          ST
              *

7941          KK  L72RIDROUTE
7942          KM        Cross-section: Determined from Loop 303 Drainage Improvements
7943          KM        I-10 to Gila River CAR dated Jan 2008,
7944          KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1, RLP12
7945          RS       1    FLOW
7946          RC   0.013    0.013    0.013     1225   0.0043     0.00
7947          RX    0.00    10.80    12.40    14.00    15.60    17.20    18.80    29.60
7948          RY  990.30   984.90   984.90   984.90   984.90   984.90   984.90   990.30
              *

7949          KK  RIDS13ROUTE
7950          KM        Cross-section: Determined from Loop 303 Drainage
7951          KM        Improvements I-10 to Gila River CAR dated Jan 2008
7952          RS       2    FLOW
7953          RC   0.040    0.040    0.040     3121   0.0047     0.00
7954          RX    0.00    10.00    15.00    20.00    25.00    30.00    35.00    45.00
7955          RY    4.00     2.00     1.00     0.00     0.00     1.00     2.00     4.00
              *

7956          KK     S12BASIN
7957          KM        BASIN BOUNDARY FROM 1990 TOPO, RID
7958          BA   0.203
7959          LG    0.19     0.28     4.80     0.37       23
7960          UI       0      189      597      458      194       81       31       16        0        0
7961          UI       0        0        0        0        0        0        0        0        0        0
7962          UI       0        0        0        0        0        0        0        0        0        0
7963          UI       0        0        0        0        0        0        0        0        0        0
7964          UI       0        0        0        0        0        0        0        0        0        0
              *

7965          KK   SRS12STORAGE
7966          KM        Storage behind canal (WLB)
7967          KO
7968          RS       1    STOR
7969          SV            3.78     5.29    57.30
7970          SQ                   46.0016968.00
7971          SE  1006.7 1007.80 1008.00 1010.00
7972          ST
              *
1                                          HEC-1 INPUT                                                    PAGE201

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

7973          KK  S12S13ROUTE
7974          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7975          KM        width based on aerial / Manning's N Value: clean straight earth
7976          RS       2    FLOW
7977          RC   0.022    0.022    0.022     3446   0.0055     0.00
7978          RX  100.00   125.00   150.00   170.00   210.00   270.00   290.00   310.00
7979          RY  1002.5 1002.30 1002.00   998.00   998.10 1002.00 1002.30 1002.50
              *

7980          KK     S13BASIN
7981          KM        BASIN BOUNDARY FROM COTTON LANE RV & GOLF RESORT MASTER DRAINAGE
7982          KM        REPORT DATED 5/97 BY KAMINSKI HUBBARD ENGINEERING
7983          BA   0.306
7984          LG    0.13     0.25     5.10     0.40       13
7985          UI       0       74      262      399      639      453      286      126       70       26
7986          UI      18        0        0        0        0        0        0        0        0        0
7987          UI       0        0        0        0        0        0        0        0        0        0
7988          UI       0        0        0        0        0        0        0        0        0        0
7989          UI       0        0        0        0        0        0        0        0        0        0
              *

7990          KK  DS13REDIVERT
7991          KM        Retention volume estimated based on aerial
7992          DT    RS13      3.3      0.0
7993          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7994          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
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                *

7995            KK   CPS13COMBINE
7996            HC       3  19.218
                *

7997            KK  DS13SEDIVERT
7998            KM        Van Buren at Cotton split flow
7999            DT   DS13S      0.0      0.0
8000            DI     0.0    216.0  1302.0  2400.0      0.0      0.0      0.0      0.0      0.0      0.0
8001            DQ     0.0      0.0  1000.0  2000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

8002            KK  S13S19ROUTE
8003            KM        Cross-section determined from Loop 303 Drainage
8004            KM        Improvements I-10 to Gila River CAR dated Jan 2008,
8005            KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1, RLP13
8006            RS       1   FLOW
8007            RC   0.013   0.013   0.013    5108  0.0048    0.00
8008            RX    0.00   10.60   12.20   13.80   15.40   17.00   18.60   29.20
8009            RY  990.20  984.90  984.90  984.90  984.90  984.90  984.90  990.20
                *
1                                          HEC-1 INPUT                                                    PAGE202

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

8010            KK     S19BASIN
8011            KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
8012            KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
8013            KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
8014            BA   0.806
8015            LG    0.34    0.25    4.50    0.53       9
8016            UI       0      48      50      96     178     232     263     295     345     392
8017            UI     517     624     532     448     398     345     294     259     218     160
8018            UI     105      85      80      60      49      45      15      15      15      15
8019            UI      15      15      15      15       0       0       0       0       0       0
8020            UI       0       0       0       0       0       0       0       0       0       0
                *

8021            KK  DS19REDIVERT
8022            KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel F
8023            KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel B3
8024            KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel E
8025            KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel H
8026            DT    RS19    43.2     0.0
8027            DI     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8028            DQ     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

8029            KK   CPS19COMBINE
8030            HC       2  20.024
                *

8031            KK  S19S20ROUTE
8032            KM        Cross-section determined from Loop 303 Drainage
8033            KM        Improvements I-10 to Gila River CAR dated Jan 2008,
8034            KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1, RLP14
8035            RS       2    FLOW
8036            RC   0.013   0.013   0.013    5288  0.0022    0.00
8037            RX    0.00   15.80   19.00   22.20   25.40   28.60   31.80   47.60
8038            RY  1118.5 1110.60 1110.60 1110.60 1110.60 1110.60 1110.60 1118.50
                *

8039            KK     B95BASIN
8040            KM        BASIN BOUNDARY FROM FIELD VISIT, WALL ON SOUTH BOUNDARY
8041            BA   0.075
8042            LG    0.48    0.25    4.80    0.45       4
8043            UI       0      14      48      84     106      95      79      54      36      20
8044            UI      15      10       7       2       2       2       1       2       1       2
8045            UI       0       0       0       0       0       0       0       0       0       0
8046            UI       0       0       0       0       0       0       0       0       0       0
8047            UI       0       0       0       0       0       0       0       0       0       0
                *

8048            KK  B95B96ROUTE
8049            KM        Cross-section: Ag field, assumed 0.5% side slopes
8050            KM        V-ditch / Manning's N Value: avg value for cultivated areas
8051            KM        from Estimated Manning's Roughness Coefficient for
8052            KM        Stream Channels and Flood Plains in MC
8053            RS      36    FLOW
1                                          HEC-1 INPUT                                                    PAGE203

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

8054            RC   0.038   0.038   0.038    8075  0.0020    0.00
8055            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8056            RY  1078.0 1077.50 1076.50 1076.00 1076.30 1076.50 1077.50 1078.00
                *

8057            KK     B96BASIN
8058            KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8059            KM        BY DEL RIO ENG (2006)
8060            BA   0.692
8061            LG    0.36    0.25    4.70    0.46      10
8062            UI       0      52      53     106     218     304     326     414     441     439
8063            UI     421     370     399     273     294     206     174     153     130      91
8064            UI      81      64      55      48      42      30      30      30      13       6
8065            UI       7       6       7       6       7       7       6       7       6       7
8066            UI       6       7       6       7       0       0       0       0       0       0
                *

8067            KK  DB96REDIVERT
8068            KM        Retention volume estimated based on aerial
8069            DT    RB96     4.0     0.0
8070            DI     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8071            DQ     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

8072            KK   CPB96COMBINE
8073            HC       2   0.767
                *

8074            KK  B96B97ROUTE
8075            KM        Cross-section: estimated from aerial and topo
8076            KM        V-ditch / Manning's N Value: grass - golf course
8077            RS       7    FLOW
8078            RC   0.025   0.025   0.025    6205  0.0020    0.00
8079            RX  100.00  145.00  190.00  240.00  340.00  390.00  435.00  455.00
8080            RY  1018.0 1017.80 1017.50 1015.00 1015.50 1017.50 1017.80 1018.00
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                 *
8081             KK     B97BASIN
8082             KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8083             KM        BY DEL RIO ENG (2006)
8084             BA   0.931
8085             LG    0.23     0.25     4.70     0.39       25
8086             UI       0      112      321      561      736     1053     1333      972      748      549
8087             UI     309      192      125       72       35       35       34        0        0        0
8088             UI       0        0        0        0        0        0        0        0        0        0
8089             UI       0        0        0        0        0        0        0        0        0        0
8090             UI       0        0        0        0        0        0        0        0        0        0
                 *

8091             KK   CPB97COMBINE
8092             HC       2   1.698
                 *
1                                                HEC-1 INPUT                                                PAGE204

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

8093             KK  DB97REDIVERT
8094             KM        Pebblecreek Phase II Master Drainage Report (west half)
8095             DT    RB97     94.0      0.0
8096             DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8097             DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                 *

8098             KK   SRB97STORAGE
8099             KM        Storage per Palm Valley Phase 8 basin
8100             KO
8101             RS       1     STOR
8102             SV            15.40    58.50    67.00
8103             SQ            10.00    55.00  1000.00
8104             SE   1001.0 1003.00  1009.00  1010.00
8105             ST
                 *

8106             KK  DB97SEDIVERT
8107             KM        Split flow: bleed pipe from basin to south, overflow will pond at RID th
8108             DT   DD97S      0.0      0.0
8109             DI     0.0      3.6      9.8     11.5     13.3     14.8     16.2   5000.0      0.0      0.0
8110             DQ     0.0      3.6      9.8     11.5     13.3     14.8     16.2     16.2      0.0      0.0
                 *

8111             KK  B97B99ROUTE
8112             KM        Cross-section: Ag field, assumed 0.5% side slopes
8113             KM        V-ditch / Manning's N Value: Ag field
8114             RS       1     FLOW
8115             RC   0.038    0.038    0.038     3043   0.0001     0.00
8116             RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
8117             RY  1000.0   999.50   998.50   998.00   998.30   998.50   999.50  1000.00
                 *

8118             KK     B99BASIN
8119             KM        BASIN BOUNDARY FROM RID, 1990 TOPO
8120             BA   0.158
8121             LG    0.42     0.24     4.60     0.49       13
8122             UI       0       18       36       96      123      152      158      137      127      101
8123             UI      68       57       36       27       21       18       10       11        5        2
8124             UI       3        2        2        3        2        3        2        2        0        0
8125             UI       0        0        0        0        0        0        0        0        0        0
8126             UI       0        0        0        0        0        0        0        0        0        0
                 *

8127             KK   CPB99COMBINE
8128             HC       2   1.856
                 *

8129             KK  B99S11ROUTE
8130             KM        Cross-section: Cross-section determined from
8131             KM        aerial and 1991 topo / Manning's N Value: earth
8132             KM        w/ sparse trees and brush
8133             RS       1     FLOW
8134             RC   0.032    0.032    0.032      382   0.0001     0.00
1                                                HEC-1 INPUT                                                PAGE205

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

8135             RX  100.00   102.00   104.00   134.00   224.00   274.00   276.00   278.00
8136             RY  1020.2  1020.10  1020.00  1008.00  1008.10  1020.00  1020.10  1020.20
                 *

8137             KK     S11BASIN
8138             KM        BASIN BOUNDARY FROM 1990 TOPO, RID
8139             BA   0.064
8140             LG    0.34     0.23     4.60     0.47       27
8141             UI       0        7       11       30       40       55       58       56       51       42
8142             UI      37       25       20       15       11        8        7        5        4        4
8143             UI       1        1        1        0        1        1        1        1        1        1
8144             UI       1        0        0        0        0        0        0        0        0        0
8145             UI       0        0        0        0        0        0        0        0        0        0
                 *

8146             KK   CPS11COMBINE
8147             HC       2    1.92
                 *

8148             KK   SRS11STORAGE
8149             KM        Storage behind canal
8150             KO
8151             RS       1     STOR
8152             SV             6.24    21.77    28.91
8153             SQ                             726.00
8154             SE   1007.4 1008.00  1008.70  1009.00
8155             ST
                 *

8156             KK  S11S14ROUTE
8157             KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8158             KM        width based on aerial / Manning's N Value: clean straight earth
8159             RS       1     FLOW
8160             RC   0.022    0.022    0.022     4396   0.0036     0.00
8161             RX  100.00   105.00   110.00   122.00   172.00   184.00   189.00   194.00
8162             RY  1004.5  1004.30  1004.00  1001.00  1001.10  1004.00  1004.30  1004.50
                 *

8163             KK     S14BASIN
8164             KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
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8165          KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
8166          KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
8167          KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
8168          BA   0.361
8169          LG    0.36    0.25    4.70    0.42      20
8170          UI       0      39      96     183     235     308     459     413     322     245
8171          UI     185     109      67      48      34      12      12      12      12       0
8172          UI       0       0       0       0       0       0       0       0       0       0
8173          UI       0       0       0       0       0       0       0       0       0       0
8174          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8175          KK  DS14REDIVERT
8176          KM        Final Drainage Report for Glen River at Canyon Trails Parcel 3L
8177          KM        Final Drainage Report for Canyon Trails Court Homes
8178          KM        Remaining retention volume estimated from aerial
8179          DT    RS14    20.1     0.0
8180          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8181          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8182          KK  CPS14ACOMBINE
8183          HC       2   2.281
              *

8184          KK  DS13SERETRIEVE
8185          DR   DS13S
              *

8186          KK  S13S14ROUTE
8187          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8188          KM        width based on aerial / Manning's N Value: clean straight earth
8189          RS       1    FLOW
8190          RC   0.022   0.022   0.022     995  0.0010    0.00
8191          RX  100.00  104.00  108.00  112.00  137.00  141.00  145.00  149.00
8192          RY  983.00  982.00  981.00  980.00  979.90  981.00  982.00  983.00
              *

8193          KK  CPS14BCOMBINE
8194          HC       2  21.499
              *

8195          KK  S14S16ROUTE
8196          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8197          KM        width based on aerial / Manning's N Value: grass
8198          RS       4    FLOW
8199          RC   0.025   0.025   0.025    5363  0.0041    0.00
8200          RX  100.00  112.00  124.00  136.00  186.00  198.00  208.00  218.00
8201          RY  982.50  982.30  982.00  979.00  979.10  982.00  982.30  982.50
              *

8202          KK     B98BASIN
8203          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8204          KM        BY DEL RIO ENG (2006)
8205          BA   0.267
8206          LG    0.25    0.25    4.70    0.36      30
8207          UI       0     102     327     588     534     310     118      51      19      19
8208          UI       0       0       0       0       0       0       0       0       0       0
8209          UI       0       0       0       0       0       0       0       0       0       0
8210          UI       0       0       0       0       0       0       0       0       0       0
8211          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8212          KK  DB98REDIVERT
8213          KM        Retention volume estimated based on aerial
8214          DT    RB98    26.1     0.0
8215          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8216          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8217          KK  B98100ROUTE
8218          KM        Cross-section: Estimated based on aerial
8219          KM        Manning's N Value: street and ROW
8220          RS       1    FLOW
8221          RC   0.022   0.016   0.022    1163  0.0050    0.00
8222          RX  100.00  120.00  140.00  142.00  162.00  164.00  184.00  204.00
8223          RY  1002.5 1002.30 1002.00 1001.50 1001.40 1001.90 1002.20 1002.50
              *

8224          KK    B100BASIN
8225          KM        BASIN BOUNDARY RID AND PALM VALLEY, 1990 TOPO
8226          BA   0.120
8227          LG    0.43    0.25    5.20    0.37      16
8228          UI       0      27     103     169     188     157     109      69      38      24
8229          UI      16      12       2       3       3       3       2       3       0       0
8230          UI       0       0       0       0       0       0       0       0       0       0
8231          UI       0       0       0       0       0       0       0       0       0       0
8232          UI       0       0       0       0       0       0       0       0       0       0
              *

8233          KK  DB97SERETRIEVE
8234          DR   DD97S
              *

8235          KK  CPB100COMBINE
8236          HC       3   2.085
              *

8237          KK   B100SROUTE
8238          KM        Cross-section: Cross-section determined from
8239          KM        aerial and 1991 topo / Manning's N Value: grass
8240          RS       3    FLOW
8241          RC   0.032   0.016   0.032    4838  0.0025    0.00
8242          RX  100.00  112.00  124.00  136.00  176.00  188.00  200.00  212.00
8243          RY  998.50  998.30  998.00  995.00  995.10  998.00  998.30  998.50
              *

8244          KK     S15BASIN
8245          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
8246          KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
8247          KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
8248          KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
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8249          BA   0.482
8250          LG    0.26    0.27    4.65    0.37      24
8251          UI       0     142     475     771    1039     662     361     150      70      29
8252          UI      29       0       0       0       0       0       0       0       0       0
8253          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8254          UI       0       0       0       0       0       0       0       0       0       0
8255          UI       0       0       0       0       0       0       0       0       0       0
              *

8256          KK  DS15REDIVERT
8257          KM        Final Drainage Report for Broadstone at Canyon Trails
8258          KM        Drainage Report for The Rock of Refuge Church
8259          KM        Remaining retention volume estimated from aerial
8260          DT    RS15    24.8     0.0
8261          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8262          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8263          KK   CPS15COMBINE
8264          HC       2   2.567
              *

8265          KK  S15S16ROUTE
8266          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8267          KM        width based on aerial / Manning's N Value: grass
8268          RS       5    FLOW
8269          RC   0.025   0.025   0.025    6178  0.0029    0.00
8270          RX  100.00  108.00  116.00  128.00  178.00  190.00  202.00  222.00
8271          RY  977.50  977.30  977.00  975.00  975.10  977.00  977.30  977.50
              *

8272          KK     S16BASIN
8273          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT
8274          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
8275          BA   0.683
8276          LG    0.28    0.26    5.20    0.32      23
8277          UI       0      59      86     222     295     359     432     580     733     575
8278          UI     477     392     314     244     143     101      84      59      37      18
8279          UI      19      18      18      18       0       0       0       0       0       0
8280          UI       0       0       0       0       0       0       0       0       0       0
8281          UI       0       0       0       0       0       0       0       0       0       0
              *

8282          KK  DS16REDIVERT
8283          KM        Final Drainage Report for Canyon Trails Unit 3 Infrastructure
8284          KM        Final Drainage Report for Curtis Commons
8285          KM        Remaining retention volume estimated from aerial
8286          DT    RS16    53.9     0.0
8287          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8288          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8289          KK   CPS16COMBINE
8290          HC       3  23.051
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8291          KK  S16S18ROUTE
8292          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8293          KM        width based on aerial / Manning's N Value: clean straight earth
8294          RS       4    FLOW
8295          RC   0.022   0.022   0.022    6594  0.0039    0.00
8296          RX  100.00  112.00  124.00  136.00  176.00  188.00  208.00  228.00
8297          RY  956.50  956.30  956.00  953.00  953.10  956.00  956.30  956.50
              *

8298          KK     S17BASIN
8299          KM        BASIN BOUNDARY FROM 1990 TOPO AND FINAL DRAINAGE REPORT
8300          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
8301          BA   0.260
8302          LG    0.50    0.25    5.80    0.29       0
8303          UI       0      16      17      26      43      76      96      98     124     136
8304          UI     138     138     131     114     122     104      87      88      65      55
8305          UI      48      51      30      28      25      21      19      15      15      12
8306          UI       9       9       9       8       2       2       2       2       3       2
8307          UI       2       2       2       2       2       2       2       2       2       2
              *

8308          KK  S17S18ROUTE
8309          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8310          KM        width based on aerial / Manning's N Value: clean straight earth
8311          RS       4    FLOW
8312          RC   0.022   0.022   0.022    5337  0.0049    0.00
8313          RX  100.00  120.00  140.00  156.00  186.00  202.00  222.00  242.00
8314          RY  952.50  952.30  952.00  950.00  949.90  952.00  952.30  952.50
              *

8315          KK     S18BASIN
8316          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4
8317          KM        SOUTH INFRASTRUCTURE DATED 2/8/05 BY CVL AND MASTER DRAINAGE REPORT
8318          KM        FOR CANYON TRAILS DATED 11/12/99 BY CVL. AT THE OUTLET OF THIS BASIN
8319          KM        THERE IS A CULVERT UNDER LOWER BUCKEYE ROAD THAT DOES NOT GO
8320          KM        UNDER THE ROAD.  THE WATER WILL POND UP AND SPILL OVER LOWER
8321          KM        BUCKEYE ROAD.
8322          BA   0.740
8323          LG    0.28    0.25    4.90    0.33      17
8324          UI       0      73     150     319     408     520     697     896     704     558
8325          UI     436     342     204     126     101      73      29      23      22      23
8326          UI      23       0       0       0       0       0       0       0       0       0
8327          UI       0       0       0       0       0       0       0       0       0       0
8328          UI       0       0       0       0       0       0       0       0       0       0
              *

8329          KK  DS18REDIVERT
8330          KM        Final Drainage Report for Canyon Trails Unit 4 South I
8331          KM        Infrastructure, Final Drainage Report for Canyon Trails Unit 4
8332          KM        South Parcel B, Final Drainage Report for Canyon Trails
8333          KM        Unit 4 South Parcel A, Final Drainage Report for
8334          KM        Canyon Trails Unit 4 South Parcels C & G, Final Drainage Report for
8335          KM        Canyon Trails Unit 4 South Parcel D, E and F, Drainage Report for Aldea
8336          DT    RS18    61.4     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8337          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8338          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8339          KK   CPS18COMBINE
8340          HC       3  24.051
              *

8341          KK     S20BASIN
8342          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR UNITS I, II, & III
8343          KM        COTTONFLOWER COMMUNITY DATED 8/24/99 BY AMERICAN ENGINEERING COMPANY
8344          BA   0.608
8345          LG    0.33    0.26    4.65    0.40      19
8346          UI       0      47      51     167     222     270     317     380     531     581
8347          UI     452     384     316     262     213     145      84      78      56      47
8348          UI      22      15      14      15      15      14       0       0       0       0
8349          UI       0       0       0       0       0       0       0       0       0       0
8350          UI       0       0       0       0       0       0       0       0       0       0
              *

8351          KK  DS20REDIVERT
8352          KM        Final Drainage Report for Units I, II, & III - Cottonflower
8353          KM        Community, Final Drainage Report for Sin Lomas
8354          DT    RS20    24.1     0.0
8355          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8356          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8357          KK   CPS20COMBINE
8358          HC       3  25.465
              *

8359          KK  S20S26ROUTE
8360          KM        Cross-section: Determined from Loop 303 Drainage
8361          KM        Improvements I-10 to Gila River CAR dated Jan 2008,
8362          KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1, RLP15
8363          RS       1    FLOW
8364          RC   0.013   0.013   0.013    4273  0.0056    0.00
8365          RX    0.00   11.00   12.60   14.20   15.80   17.40   19.00   30.00
8366          RY  925.00  919.50  919.50  919.50  919.50  919.50  919.50  925.00
              *

8367          KK     S26BASIN
8368          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8369          BA   0.187
8370          LG    0.49    0.25    4.50    0.54       1
8371          UI       0      13      14      25      46      78      74      97     112     111
8372          UI     111     101      94      96      70      74      50      45      38      36
8373          UI      24      21      17      16      12      12       9       7       8       8
8374          UI       2       1       2       2       1       2       2       1       2       2
8375          UI       1       2       2       1       2       2       1       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8376          KK   CPS26COMBINE
8377          HC       2  25.652
              *

8378          KK  S26S31ROUTE
8379          KM        Cross-section: Determined from Loop 303 Drainage
8380          KM        Improvements I-10 to Gila River CAR dated Jan 2008,
8381          KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1,
8382          KM        used same x-section as RLP15
8383          RS       1    FLOW
8384          RC   0.013   0.013   0.013    3661  0.0056    0.00
8385          RX    0.00   11.00   12.60   14.20   15.80   17.40   19.00   30.00
8386          RY  925.00  919.50  919.50  919.50  919.50  919.50  919.50  925.00
              *

8387          KK    S26ABASIN
8388          KM        Boundary based on L303 Drainage Improvement I-10 to
8389          KM        Gila River CAR dated Jan 2008 prepared by PEC
8390          BA   0.275
8391          LG    0.37    0.25    4.65    0.48      18
8392          UI       0      26      36      79     146     179     199     216     213     182
8393          UI     177     144     112      84      79      49      41      32      26      23
8394          UI      15      15      14       3       4       3       3       3       4       3
8395          UI       3       4       3       3       3       4       0       0       0       0
8396          UI       0       0       0       0       0       0       0       0       0       0
              *

8397          KK  DS26REDIVERT
8398          KM        Retention volume estimated based on aerial
8399          DT    RS26     8.5     0.0
8400          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8401          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8402          KK  DS21SERETRIEVE
8403          DR   DS21S
              *

8404          KK  S2126AROUTE
8405          KM        Cross-section: Side slopes and width based on aerial and topo
8406          KM        Manning's N Value: earth w/ sparse trees and shrubs, parking lot ROB
8407          RS      14    FLOW
8408          RC   0.032   0.032   0.016    3015  0.0017    0.00
8409          RX  100.00  105.00  110.00  200.00  287.00  334.00  734.00  735.00
8410          RY  912.00  911.00  910.00  906.00  906.10  910.00  911.90  912.00
              *

8411          KK  CPS26ACOMBINE
8412          HC       2   0.401
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8413          KK  DS26SEDIVERT
8414          KM        175th alignment at RR tracks split flow
8415          DT   DS26S     0.0     0.0
8416          DI     0.0    37.5   197.1   950.1  2315.7     0.0     0.0     0.0     0.0     0.0
8417          DQ     0.0     0.0     0.0   231.5   781.2     0.0     0.0     0.0     0.0     0.0
              *
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8418          KK  26A31AROUTE
8419          KM        Cross-section: Based on aerial and topo
8420          KM        Manning's N Value: clean earth; straight;
8421          KM        earth w/ sparse trees and shrubs LOB and ROB
8422          RS       1    FLOW
8423          RC   0.035   0.022   0.035    2621  0.0031    0.00
8424          RX  100.00  110.00  120.00  130.00  295.00  575.00  585.00  595.00
8425          RY  906.00  905.50  905.00  904.00  904.10  905.80  905.90  906.00
              *

8426          KK     S28BASIN
8427          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
8428          KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
8429          KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
8430          BA   0.136
8431          LG    0.14    0.26    4.45    0.55       6
8432          UI       0     232     585     199      30       0       0       0       0       0
8433          UI       0       0       0       0       0       0       0       0       0       0
8434          UI       0       0       0       0       0       0       0       0       0       0
8435          UI       0       0       0       0       0       0       0       0       0       0
8436          UI       0       0       0       0       0       0       0       0       0       0
              *

8437          KK  DS28REDIVERT
8438          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel G
8439          DT    RS28    10.6     0.0
8440          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8441          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8442          KK  S28S29ROUTE
8443          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
8444          KM        width based on aerial / Manning's N Value: clean straight earth
8445          RS       1    FLOW
8446          RC   0.022   0.022   0.022    5299  0.0070    0.00
8447          RX  100.00  140.00  180.00  192.00  193.00  205.00  225.00  245.00
8448          RY  958.50  958.30  958.00  956.00  956.10  958.00  958.10  958.20
              *

8449          KK     S29BASIN
8450          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8451          BA   0.623
8452          LG    0.43    0.25    4.65    0.44       5
8453          UI       0      46      47      94     184     272     282     361     393     389
8454          UI     383     328     346     264     271     187     163     134     130      85
8455          UI      76      58      53      43      42      27      26      27      19       6
8456          UI       6       5       6       6       6       5       6       6       6       6
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8457          UI       5       6       6       6       5       0       0       0       0       0
              *

8458          KK   CPS29COMBINE
8459          HC       2   0.759
              *

8460          KK  S29S30ROUTE
8461          KM        Cross-section: Estimated 2' deep and 4:1 side
8462          KM        slopes, width based on aerial / Manning's N
8463          KM        Value: clean straight earth, street LOB
8464          RS       3    FLOW
8465          RC   0.016   0.022   0.022    5305  0.0066    0.00
8466          RX  100.00  120.00  140.00  152.00  156.00  168.00  208.00  248.00
8467          RY  932.50  932.30  932.00  930.00  930.10  932.00  932.30  932.50
              *

8468          KK     S30BASIN
8469          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8470          BA   0.465
8471          LG    0.49    0.25    4.60    0.50       2
8472          UI       0      28      29      43      70     129     165     162     217     229
8473          UI     238     242     239     200     207     208     148     166     122     108
8474          UI      86      82      75      54      46      39      36      30      26      26
8475          UI      19      16      16      17      12       4       3       4       3       4
8476          UI       3       4       4       3       4       3       4       3       4       3
              *

8477          KK   CPS30COMBINE
8478          HC       2   1.224
              *

8479          KK  S30S32ROUTE
8480          KM        Cross-section: Ag field, assumed 0.5% side slopes
8481          KM        V-ditch / Manning's N Value: avg value for cultivated
8482          KM        areas from Estimated Manning's Roughness Coefficient
8483          KM        for Stream Channels and Flood Plains in MC
8484          RS       3    FLOW
8485          RC   0.038   0.038   0.038    1375  0.0015    0.00
8486          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8487          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8488          KK     S32BASIN
8489          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8490          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
8491          BA   0.147
8492          LG    0.43    0.25    4.80    0.41       3
8493          UI       0      10      11      19      33      59      55      77      84      86
8494          UI      85      81      71      79      55      58      42      37      30      31
8495          UI      20      16      15      12      11       9       9       6       5       6
8496          UI       4       2       1       1       1       2       1       1       1       2
8497          UI       1       1       1       2       1       1       1       2       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8498          KK   CPS32COMBINE
8499          HC       2   1.371
              *

8500          KK    S31ABASIN
8501          KM        Boundary based on L303 Drainage Improvement I-10 to
8502          KM        Gila River CAR dated Jan 2008 prepared by PEC
8503          BA   0.090
8504          LG    0.50    0.25    4.65    0.49       0
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8505          UI       0       9      12      29      49      60      70      73      68      63
8506          UI      54      49      34      25      23      16      12      11       7       7
8507          UI       5       5       3       1       1       1       1       1       1       1
8508          UI       1       1       2       1       1       0       0       0       0       0
8509          UI       0       0       0       0       0       0       0       0       0       0
              *

8510          KK     S31BASIN
8511          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8512          BA   0.459
8513          LG    0.49    0.25    4.60    0.50       1
8514          UI       0      26      27      35      56     105     149     146     183     202
8515          UI     221     225     221     214     187     193     187     140     150     121
8516          UI     102      84      74      83      50      45      43      33      32      26
8517          UI      24      24      17      15      15      15      13       4       3       3
8518          UI       4       3       3       3       4       3       3       4       3       3
              *

8519          KK   CPS31COMBINE
8520          HC       5  27.973
              *

8521          KK   SRS31STORAGE
8522          KM        PONDING BEHIND SPRR AT 177TH AVE, SR359,
8523          KM        HEC-1 MODEL: ALT_13_FUTURE_CIRCULAR_MODIFIED.OH1
8524          KM        DATED JAN 18, 2008
8525          KO
8526          RS       1    STOR
8527          SV           0.10    5.90   19.10   33.60   49.20  142.20  163.50  184.70
8528          SQ          59.00   98.00  129.00  158.00  200.00  450.00 1135.00 1270.00
8529          SE  891.30  893.00  894.00  895.00  896.00  897.00  902.00  903.00  904.00
8530          ST
              *

8531          KK  S31S27ROUTE
8532          KM        Cross-section: Determined from Loop 303 Drainage
8533          KM        Improvements I-10 to Gila River CAR dated Jan 2008,
8534          KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1, R359
8535          RS       6    FLOW
8536          RC   0.075   0.075   0.075    1409  0.0020    0.00
8537          RX  1000.0 1001.00 1002.00 1220.00 2380.00 2758.00 2759.00 2760.00
8538          RY  900.00  897.00  897.00  896.00  896.00  897.00  897.00  900.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8539          KK     S27BASIN
8540          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8541          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
8542          BA   0.116
8543          LG    0.40    0.31    5.40    0.29       7
8544          UI       0      23      86     141     171     152     118      72      48      29
8545          UI      20      12       9       2       3       3       2       3       2       0
8546          UI       0       0       0       0       0       0       0       0       0       0
8547          UI       0       0       0       0       0       0       0       0       0       0
8548          UI       0       0       0       0       0       0       0       0       0       0
              *

8549          KK  DS26SERETRIEVE
8550          DR   DS26S
              *

8551          KK  S26A27ROUTE
8552          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
8553          KM        Manning's N Value: avg value for cultivated areas from Estimated
8554          KM        Manning's Roughness Coefficient for Stream Channels and Flood Plains in
8555          RS       1    FLOW
8556          RC   0.038   0.038   0.038    1674  0.0011    0.00
8557          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8558          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8559          KK   CPS27COMBINE
8560          HC       3  28.089
              *

8561          KK  S27S82ROUTE
8562          KM        Cross-section: Determined from Loop 303 Drainage
8563          KM        Improvements I-10 to Gila River CAR dated Jan 2008
8564          RS       1    FLOW
8565          RC   0.040   0.040   0.040    1040  0.0004    0.00
8566          RX    0.00   10.00   15.00   20.00   55.00   60.00   65.00   75.00
8567          RY    4.00    2.00    1.00    0.00    0.00    1.00    2.00    4.00
              *

8568          KK     S82BASIN
8569          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8570          KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
8571          BA   0.174
8572          LG    0.50    0.25    6.00    0.27       0
8573          UI       0      12      12      22      36      67      66      89      93     100
8574          UI     101      96      84      88      71      66      56      46      35      36
8575          UI      27      21      18      15      14      10      11       8       7       6
8576          UI       7       2       2       1       2       1       1       2       1       2
8577          UI       1       2       1       2       1       1       2       1       2       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8578          KK   CPS82COMBINE
8579          HC       2  28.263
              *

8580          KK  S8281AROUTE
8581          KM        Cross-section: Determined from Loop 303 Drainage
8582          KM        Improvements I-10 to Gila River CAR dated Jan 2008
8583          RS       2    FLOW
8584          RC   0.040   0.040   0.040    1073  0.0004    0.00
8585          RX    0.00   10.00   15.00   20.00   55.00   60.00   65.00   75.00
8586          RY    4.00    2.00    1.00    0.00    0.00    1.00    2.00    4.00
              *

8587          KK    S81ABASIN
8588          KM        Boundary based on L303 Drainage Improvement I-10
8589          KM        to Gila River CAR dated Jan 2008 prepared by PEC
8590          BA   0.039
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8591          LG    0.50    0.25    5.80    0.29       0
8592          UI       0       6      15      32      45      48      40      34      26      17
8593          UI      11       8       6       4       3       1       1       1       1       0
8594          UI       1       1       0       0       0       0       0       0       0       0
8595          UI       0       0       0       0       0       0       0       0       0       0
8596          UI       0       0       0       0       0       0       0       0       0       0
              *

8597          KK  CPS81ACOMBINE
8598          HC       2  28.302
              *

8599          KK  S81A25ROUTE
8600          KM        Cross-section: Determined from Loop 303 Drainage
8601          KM        Improvements I-10 to Gila River CAR dated Jan 2008
8602          RS       1    FLOW
8603          RC   0.040   0.040   0.040    1229  0.0004    0.00
8604          RX    0.00   10.00   15.00   20.00   55.00   60.00   65.00   75.00
8605          RY    4.00    2.00    1.00    0.00    0.00    1.00    2.00    4.00
              *

8606          KK     S25BASIN
8607          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
8608          BA   0.591
8609          LG    0.49    0.23    6.20    0.25       0
8610          UI       0      27      28      27      45      58      97     142     166     142
8611          UI     190     209     228     227     229     227     227     195     188     204
8612          UI     197     142     146     156     110     103      91      79      78      80
8613          UI      52      49      44      40      33      34      28      24      25      25
8614          UI      16      16      15      15      15      16       3       4       3       4
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8615          KK   CPS25COMBINE
8616          HC       3  35.253
              *

8617          KK     S81BASIN
8618          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
8619          BA   0.092
8620          LG    0.50    0.21    6.40    0.23       0
8621          UI       0      10      18      48      63      86      87      81      78      55
8622          UI      47      34      27      18      14      11       8       6       6       2
8623          UI       1       2       1       1       1       2       1       1       2       1
8624          UI       0       0       0       0       0       0       0       0       0       0
8625          UI       0       0       0       0       0       0       0       0       0       0
              *

8626          KK    S82ABASIN
8627          KM        Boundary based on L303 Drainage Improvement I-10
8628          KM        to Gila River CAR dated Jan 2008 prepared by PEC
8629          BA   0.030
8630          LG    0.50    0.10   11.20    0.04       0
8631          UI       0       6      18      34      42      38      32      22      14       9
8632          UI       5       4       3       1       1       0       1       1       0       1
8633          UI       0       0       0       0       0       0       0       0       0       0
8634          UI       0       0       0       0       0       0       0       0       0       0
8635          UI       0       0       0       0       0       0       0       0       0       0
              *

8636          KK  S82A83ROUTE
8637          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
8638          KM        Manning's N Value: avg value for cultivated areas from Estimated
8639          KM        Manning's Roughness Coefficient for Stream Channels and Flood Plains in
8640          RS      48    FLOW
8641          RC   0.038   0.038   0.038    6889  0.0008    0.00
8642          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8643          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8644          KK     S83BASIN
8645          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS
8646          KM        BEHIND EXTENSION CANAL, OVERTOPS AND ENTERS GILA RIVER
8647          BA   0.215
8648          LG    0.40    0.25    5.60    0.31      19
8649          UI       0      10      10       9      17      22      35      51      61      52
8650          UI      70      77      81      83      84      83      82      70      70      74
8651          UI      71      51      54      57      40      37      33      29      28      29
8652          UI      18      18      16      15      12      12      10       9       9       9
8653          UI       6       5       6       6       6       5       1       1       2       1
              *
```



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

8654          KK   CPS83COMBINE
8655          HC       2   0.245
              *

8656          KK     S84BASIN
8657          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
8658          BA   0.207
8659          LG    0.30    0.13    8.40    0.10      12
8660          UI       0      19      25      53     108     118     150     159     160     135
8661          UI     139     101      94      68      56      47      32      26      22      17
8662          UI      14      11      11       7       2       3       2       2       3       2
8663          UI       3       2       2       3       2       2       3       0       0       0
8664          UI       0       0       0       0       0       0       0       0       0       0
              *

8665          KK   DUMMYCOMBINE
8666          HC       5
              *

8667          KK     S35BASIN
8668          KM        ROUTING FROM I-10 CULVERT WASH LOMR STUDY, FCDMC
8669          BA   0.743
8670          LG    0.41    0.25    4.55    0.48       9
8671          UI       0      69     117     274     437     561     636     668     625     514
8672          UI     404     321     248     196     149     120      96      74      53      47
8673          UI      37      16      17      17      17      17      17       0       0       0
8674          UI       0       0       0       0       0       0       0       0       0       0
8675          UI       0       0       0       0       0       0       0       0       0       0
              *

8676          KK  S35S44ROUTE
```

```
8677          KM        Cross-section: Clean straight earth
8678          RS       6    FLOW
8679          RC   0.022   0.022   0.022    3189  0.0006    0.00
8680          RX  100.00  101.00  102.00  384.00  562.00  580.00  581.00  582.00
8681          RY  1006.0 1005.00 1004.50 1004.00 1003.90 1004.50 1005.00 1006.00
              *

8682          KK     S34BASIN
8683          KM        BASIN BOUNDARY FROM 1990 TOPO
8684          BA   0.906
8685          LG    0.37    0.26    4.55    0.44      12
8686          UI       0      81     138     324     428     519     641     905     973     729
8687          UI     606     487     381     255     144     130      82      62      25      25
8688          UI      26      25      25       0       0       0       0       0       0       0
8689          UI       0       0       0       0       0       0       0       0       0       0
8690          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE219

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

8691          KK  DS34SEDIVERT
8692          KM        Van Buren at Perryville split flow
8693          DT   DS34S     0.0     0.0
8694          DI     0.0   693.9  1872.9  4178.4  7379.2     0.0     0.0     0.0     0.0     0.0
8695          DQ     0.0   360.6  1020.0  2351.2  4235.0     0.0     0.0     0.0     0.0     0.0
              *

8696          KK  S34S44ROUTE
8697          KM        Cross-section: Ag field, assumed 0.5% side slopes
8698          KM        V-ditch / Manning's N Value: avg value for cultivated
8699          KM        areas from Estimated Manning's Roughness Coefficient
8700          KM        for Stream Channels and Flood Plains in MC
8701          RS       1    FLOW
8702          RC   0.038   0.038   0.038    1378  0.0058    0.00
8703          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8704          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8705          KK     S44BASIN
8706          KM        BASIN BOUNDARY FROM 1990 TOPO, I-10 CULVERT WASH FDS
8707          BA   0.078
8708          LG    0.32    0.26    4.80    0.34       6
8709          UI       0      20      70     106     166     113      71      29      16       5
8710          UI       5       0       0       0       0       0       0       0       0       0
8711          UI       0       0       0       0       0       0       0       0       0       0
8712          UI       0       0       0       0       0       0       0       0       0       0
8713          UI       0       0       0       0       0       0       0       0       0       0
              *

8714          KK   CPS44COMBINE
8715          HC       3   1.727
              *

8716          KK   SRS44STORAGE
8717          KM        Storage behind canal (I-10 Culvert Wash)
8718          KO
8719          RS       1    STOR
8720          SV   12.20   42.30   67.40  241.40
8721          SQ                  420.00 1290.00
8722          SE  1009.0 1010.00 1011.00 1012.00
8723          ST
              *

8724          KK  S44S45ROUTE
8725          KM        Cross-section: Estimated 2' deep and 3:1 side
8726          KM        slopes, width based on aerial / Manning's N
8727          KM        Value: clean straight earth
8728          RS      17    FLOW
8729          RC   0.022   0.022   0.022    5749  0.0002    0.00
8730          RX  100.00  106.00  112.00  118.00  120.00  126.00  146.00  366.00
8731          RY  1005.0 1003.90 1003.00  997.00  997.10 1001.00 1002.00 1005.00
              *
1                                          HEC-1 INPUT                                          PAGE220

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

8732          KK  DS34SERETRIEVE
8733          DR   DS34S
              *

8734          KK  S34S45ROUTE
8735          KM        Cross-section: Estimated 3' deep and 4:1
8736          KM        side slopes, width based on aerial / Manning's
8737          KM        N Value: clean straight earth
8738          RS       3    FLOW
8739          RC   0.022   0.022   0.022    7089  0.0013    0.00
8740          RX  100.00  101.00  106.00  112.00  122.00  128.00  130.00  134.00
8741          RY  1004.0 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1004.00
              *

8742          KK     S45BASIN
8743          KM        BLUE HORIZONS
8744          BA   0.490
8745          LG    0.10    0.24    4.60    0.53       5
8746          UI       0      73     277     422     616     847     591     419     257     124
8747          UI      78      33      22      22       0       0       0       0       0       0
8748          UI       0       0       0       0       0       0       0       0       0       0
8749          UI       0       0       0       0       0       0       0       0       0       0
8750          UI       0       0       0       0       0       0       0       0       0       0
              *

8751          KK  DS45REDIVERT
8752          KM        Final Drainage Report for Vista De Montana
8753          DT    RS45    52.0     0.0
8754          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8755          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8756          KK   CPS45COMBINE
8757          HC       3   2.217
              *

8758          KK  S45S46ROUTE
8759          KM        Cross-section: Estimated 3' deep and 4:1 side
8760          KM        slopes, width based on aerial / Manning's N
8761          KM        Value: clean straight earth
8762          RS       2    FLOW
```

```
8763          RC   0.022   0.022   0.022    1537  0.0010    0.00
8764          RX  100.00  108.00  116.00  128.00  134.00  146.00  166.00  286.00
8765          RY  1005.5 1004.25 1004.00 1001.00 1001.10 1002.00 1003.00 1005.50
              *

8766          KK     S46BASIN
8767          KM        BLUE HORIZONS
8768          BA   0.904
8769          LG    0.10    0.25    3.95    0.40       5
8770          UI       0     204     733    1101    1802    1378     895     440     229     104
8771          UI      49      49       0       0       0       0       0       0       0       0
8772          UI       0       0       0       0       0       0       0       0       0       0
8773          UI       0       0       0       0       0       0       0       0       0       0
```

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

8774          UI       0       0       0       0       0       0       0       0       0       0
              *

8775          KK  DS46REDIVERT
8776          KM        Final Drainage Report for Blue Horizons Phase 1
8777          KM        (100-year, 6-hour)
8778          DT    RS46    64.6     0.0
8779          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8780          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8781          KK   CPS46COMBINE
8782          HC       2   3.121
              *

8783          KK   SRS46STORAGE
8784          KM        Storage behind canal (WLB) Blue Horizons basins
8785          KO
8786          RS       1     STOR
8787          SV            0.32    4.52   15.06   24.62
8788          SQ                          845.00 4777.00
8789          SE  1001.5 1002.00 1003.00 1004.00 1004.50
8790          ST
              *

8791          KK  S46S47ROUTE
8792          KM        Cross-section: Ag field, assumed 0.5% side slopes
8793          KM        V-ditch / Manning's N Value: avg value for cultivated
8794          KM        areas from Estimated Manning's Roughness Coefficient
8795          KM        for Stream Channels and Flood Plains in MC
8796          RS      12     FLOW
8797          RC   0.038   0.038   0.038    7068  0.0059    0.00
8798          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8799          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8800          KK     S47BASIN
8801          KM        BASIN BOUNDARY FROM 1990 TOPO
8802          BA   0.477
8803          LG    0.45    0.25    4.10    0.63       3
8804          UI       0      31      30      51      82     148     179     190     237     256
8805          UI     256     261     233     214     233     175     168     148     117      96
8806          UI      89      81      56      50      42      38      31      28      27      17
8807          UI      18      17      18       6       4       4       4       3       4       4
8808          UI       4       4       4       3       4       4       4       4       4       3
              *

8809          KK   CPS47COMBINE
8810          HC       2   3.598
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8811          KK  S47S48ROUTE
8812          KM        Cross-section: Estimated 2' deep and 4:1 side
8813          KM        slopes, width based on aerial / Manning's N
8814          KM        Value: clean straight earth, street LOB
8815          RS       4     FLOW
8816          RC   0.016   0.022   0.022    5291  0.0076    0.00
8817          RX  100.00  108.00  116.00  122.00  126.00  132.00  152.00  272.00
8818          RY  951.00  950.50  950.00  948.00  948.10  949.00  949.50  951.00
              *

8819          KK     S48BASIN
8820          KM        BASIN BOUNDARY FROM 1990 TOPO
8821          BA   0.359
8822          LG    0.35    0.25    4.30    0.53      11
8823          UI       0      38      62     156     225     297     322     316     274     249
8824          UI     205     147     112      90      65      47      37      32      22      21
8825          UI      10       5       5       5       5       4       5       5       5       5
8826          UI       5       0       0       0       0       0       0       0       0       0
8827          UI       0       0       0       0       0       0       0       0       0       0
              *

8828          KK   CPS48COMBINE
8829          HC       2   3.957
              *

8830          KK   DS48SDIVERT
8831          KM        Broadway at Jackrabbit Trail split flow
8832          DT   DS48S     0.0     0.0
8833          DI     0.0  1258.3  3015.3  5339.9  8214.3     0.0     0.0     0.0     0.0     0.0
8834          DQ     0.0     4.3    62.7   189.5   448.6     0.0     0.0     0.0     0.0     0.0
              *

8835          KK  S48S50ROUTE
8836          KM        Cross-section: Ag field, assumed 0.5% side slopes
8837          KM        V-ditch / Manning's N Value: avg value for cultivated
8838          KM        areas from Estimated Manning's Roughness Coefficient
8839          KM        for Stream Channels and Flood Plains in MC
8840          RS       7     FLOW
8841          RC   0.038   0.038   0.038    4341  0.0058    0.00
8842          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8843          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8844          KK     S49BASIN
8845          KM        BASIN BOUNDARY FROM 1990 TOPO
8846          BA   0.376
8847          LG    0.50    0.25    4.65    0.49       0
8848          UI       0      22      23      32      51      95     132     118     177     167
```

```
8849          UI     186     191     186     170     158     167     134     122     119      86
8850          UI      79      64      68      50      40      36      29      27      23      20
8851          UI      20      14      13      12      13      10       3       2       3       3
8852          UI       3       3       3       2       3       3       3       3       3       2
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8853          KK  S49S50ROUTE
8854          KM        Cross-section: Ag field, assumed 0.5% side slopes
8855          KM        V-ditch / Manning's N Value: avg value for cultivated
8856          KM        areas from Estimated Manning's Roughness Coefficient
8857          KM        for Stream Channels and Flood Plains in MC
8858          RS       6    FLOW
8859          RC   0.038   0.038   0.038    3542  0.0062    0.00
8860          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8861          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8862          KK     S50BASIN
8863          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
8864          BA   0.307
8865          LG    0.48    0.25    4.70    0.46       2
8866          UI       0      21      22      38      66     119     116     160     167     177
8867          UI     177     171     147     159     123     118      95      79      63      63
8868          UI      46      36      31      27      23      19      19      12      12      12
8869          UI      12       3       2       3       3       2       3       2       3       3
8870          UI       2       3       2       3       3       2       3       3       0       0
              *

8871          KK   CPS50COMBINE
8872          HC       3    4.64
              *

8873          KK   SRS50STORAGE
8874          KM        Storage behind UPRR (WLB)
8875          KO
8876          RS       1    STOR
8877          SV            0.24   17.91   40.51
8878          SQ           74.00  252.00 1465.00
8879          SE  887.00  891.90  895.00  896.00
8880          ST
              *

8881          KK  S50S51ROUTE
8882          KM        Cross-section: Estimated 3' deep and 4:1 side
8883          KM        slopes, width based on aerial / Manning's N
8884          KM        Value: earth w/ sparse trees and shrubs
8885          RS       1    FLOW
8886          RC   0.032   0.032   0.032     296  0.0068    0.00
8887          RX  100.00  106.00  112.00  125.00  146.00  156.00  200.00  203.00
8888          RY  894.20  894.10  894.00  886.00  886.10  894.00  894.10  894.20
              *

8889          KK     S36BASIN
8890          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
8891          KM        DRAINING TO CULVERT UNDER I-10
8892          BA   0.270
8893          LG    0.31    0.24    4.35    0.57      14
8894          UI       0      26      47     110     167     219     244     246     229     180
8895          UI     139     111      84      66      52      40      29      25      18      17
8896          UI       7       6       6       7       6       7       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8897          UI       0       0       0       0       0       0       0       0       0       0
8898          UI       0       0       0       0       0       0       0       0       0       0
              *

8899          KK  DS36REDIVERT
8900          KM        Master Drainage Report for Cotton Lane RV and Golf Resort
8901          DT    RS36   106.2     0.0
8902          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8903          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8904          KK   SRS36STORAGE
8905          KM        Borrow pit (WLB)
8906          KO
8907          RS       1    STOR
8908          SV            6.32   19.56  300.91  635.31  899.95  942.11  979.46
8909          SQ                                                   715.00 2198.00
8910          SE  970.40  972.00  980.00  990.00 1000.00 1007.00 1008.00 1008.80
8911          ST
              *

8912          KK  S36S37ROUTE
8913          KM        Cross-section: Ag field, assumed 0.5% side slopes
8914          KM        V-ditch / Manning's N Value: avg value for cultivated
8915          KM        areas from Estimated Manning's Roughness Coefficient
8916          KM        for Stream Channels and Flood Plains in MC
8917          RS       1    FLOW
8918          RC   0.038   0.038   0.038    6104  0.0059    0.00
8919          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8920          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8921          KK     S37BASIN
8922          KM        BASIN BOUNDARY FROM 1990 TOPO
8923          BA   1.030
8924          LG    0.44    0.26    4.65    0.45       4
8925          UI       0      75      76     146     278     435     432     567     634     628
8926          UI     626     544     549     481     410     367     286     224     223     158
8927          UI     129     109      92      77      68      58      43      43      42      23
8928          UI       9       9      10       9       9      10       9       9      10       9
8929          UI       9      10       9       9      10       9       0       0       0       0
              *

8930          KK   CPS37COMBINE
8931          HC       2     1.3
              *

8932          KK  S37S38ROUTE
8933          KM        Cross-section: Ag field, assumed 0.5% side slopes
8934          KM        V-ditch / Manning's N Value: avg value for cultivated
8935          KM        areas from Estimated Manning's Roughness Coefficient
8936          KM        for Stream Channels and Flood Plains in MC
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```
8937          RS       7    FLOW
8938          RC   0.038   0.038   0.038    5485  0.0062    0.00
8939          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
```



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

8940          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8941          KK     S38BASIN
8942          KM        BASIN BOUNDARY FROM 1990 TOPO
8943          BA   0.778
8944          LG    0.48    0.25    4.70    0.45       2
8945          UI       0      51      52      90     148     265     299     360     401     435
8946          UI     429     440     368     376     357     271     287     205     178     147
8947          UI     156      98      85      75      63      54      48      47      29      29
8948          UI      29      30       8       6       7       6       7       6       7       6
8949          UI       7       6       7       6       7       6       7       6       7       6
              *

8950          KK   CPS38COMBINE
8951          HC       2   2.078
              *

8952          KK  S38S39ROUTE
8953          KM        Cross-section: Ag field, assumed 0.5% side slopes
8954          KM        V-ditch / Manning's N Value: avg value for cultivated
8955          KM        areas from Estimated Manning's Roughness Coefficient
8956          KM        for Stream Channels and Flood Plains in MC
8957          RS       6    FLOW
8958          RC   0.038   0.038   0.038    5289  0.0061    0.00
8959          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8960          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8961          KK     S39BASIN
8962          KM        BASIN BOUNDARY FROM 1990 TOPO
8963          BA   0.597
8964          LG    0.50    0.25    4.70    0.47       0
8965          UI       0      33      34      44      71     130     185     192     222     264
8966          UI     280     288     284     285     238     238     263     181     184     173
8967          UI     133     115      98     104      77      61      55      47      42      38
8968          UI      30      31      26      19      20      19      19      11       4       4
8969          UI       4       4       5       4       4       4       4       5       4       4
              *

8970          KK   CPS39COMBINE
8971          HC       2   2.675
              *

8972          KK  S39S43ROUTE
8973          KM        Cross-section: Ag field, assumed 0.5% side slopes
8974          KM        V-ditch / Manning's N Value: avg value for cultivated
8975          KM        areas from Estimated Manning's Roughness Coefficient
8976          KM        for Stream Channels and Flood Plains in MC
8977          RS       8    FLOW
8978          RC   0.038   0.038   0.038    5424  0.0029    0.00
8979          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8980          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8981          KK     S40BASIN
8982          KM        BASIN BOUNDARY FROM 1990 TOPO
8983          BA   0.512
8984          LG    0.49    0.25    4.70    0.46       0
8985          UI       0      36      37      70     128     212     205     268     309     307
8986          UI     305     276     260     257     195     196     143     120     106      93
8987          UI      66      60      44      42      33      34      22      21      21      20
8988          UI       5       4       5       4       5       5       4       5       4       5
8989          UI       4       5       4       5       4       5       5       0       0       0
              *

8990          KK  S40S41ROUTE
8991          KM        Cross-section: Ag field, assumed 0.5% side slopes
8992          KM        V-ditch / Manning's N Value: avg value for cultivated
8993          KM        areas from Estimated Manning's Roughness Coefficient
8994          KM        for Stream Channels and Flood Plains in MC
8995          RS       8    FLOW
8996          RC   0.038   0.038   0.038    5301  0.0070    0.00
8997          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8998          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

8999          KK     S41BASIN
9000          KM        BASIN BOUNDARY FROM 1990 TOPO AND COTTONWOOD UNIT 1 - FINAL DRAINAGE
9001          KM        REPORT (3RD REVIEW) DATED 12/7/05 BY DEA
9002          BA   1.003
9003          LG    0.49    0.25    4.65    0.47       0
9004          UI       0      52      53      55     111     160     256     316     293     417
9005          UI     381     445     440     444     445     371     365     404     320     275
9006          UI     316     212     200     167     150     165     110      95      85      76
9007          UI      64      63      49      48      48      32      30      30      30      30
9008          UI      13       7       7       6       7       6       7       7       6       7
              *

9009          KK   CPS41COMBINE
9010          HC       2   1.515
              *

9011          KK  S41S42ROUTE
9012          KM        Cross-section: Ag field, assumed 0.5% side slopes
9013          KM        V-ditch / Manning's N Value: avg value for cultivated
9014          KM        areas from Estimated Manning's Roughness Coefficient
9015          KM        for Stream Channels and Flood Plains in MC
9016          RS       6    FLOW
9017          RC   0.038   0.038   0.038    5312  0.0064    0.00
9018          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9019          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *
```



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

9020          KK     S42BASIN
```

```
9021          KM        BASIN BOUNDARY FROM 1990 TOPO
9022          BA   0.509
9023          LG    0.49    0.25    4.60    0.50       1
9024          UI       0      32      31      50      80     144     185     185     237     262
9025          UI     264     267     260     221     237     211     164     184     125     114
9026          UI      93      96      71      57      50      40      40      30      29      27
9027          UI      18      18      18      18       8       4       4       4       4       4
9028          UI       4       4       4       4       4       3       4       4       4       4
              *

9029          KK   CPS42COMBINE
9030          HC       2   2.024
              *

9031          KK  S42S43ROUTE
9032          KM        Cross-section: Ag field, assumed 0.5% side slopes
9033          KM        V-ditch / Manning's N Value: avg value for cultivated
9034          KM        areas from Estimated Manning's Roughness Coefficient
9035          KM        for Stream Channels and Flood Plains in MC
9036          RS       4    FLOW
9037          RC   0.038   0.038   0.038    3069  0.0039    0.00
9038          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9039          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9040          KK     S43BASIN
9041          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
9042          BA   0.347
9043          LG    0.48    0.25    4.80    0.44       2
9044          UI       0      23      22      37      62     111     131     142     178     188
9045          UI     188     190     169     156     178     117     127     101      85      66
9046          UI      67      54      40      36      29      28      21      21      17      13
9047          UI      13      12      11       3       3       3       3       2       3       3
9048          UI       3       3       3       2       3       3       3       3       3       2
              *

9049          KK   CPS43COMBINE
9050          HC       3   5.046
              *

9051          KK   SRS43STORAGE
9052          KM        Storage behind UPRR (WLB)
9053          KO
9054          RS       1    STOR
9055          SV            0.22   18.80   41.67   62.23   82.48
9056          SQ           24.00   57.00   67.00  798.00 3073.00
9057          SE  894.50  896.00  898.00  898.90  899.50  900.00
9058          ST
              *
```



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

9059          KK  S43S51ROUTE
9060          KM        Cross-section: Ag field, assumed 0.5% side slopes
9061          KM        V-ditch / Manning's N Value: avg value for cultivated
9062          KM        areas from Estimated Manning's Roughness Coefficient
9063          KM        for Stream Channels and Flood Plains in MC
9064          RS       8    FLOW
9065          RC   0.038   0.038   0.038    3220  0.0006    0.00
9066          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9067          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9068          KK     S33BASIN
9069          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9070          KM        SOUTHERN BOUNDARY IS BOUNDED BY BUCKEYE CANAL
9071          BA   0.307
9072          LG    0.48    0.21    6.40    0.23       2
9073          UI       0      14      15      14      24      30      51      74      87      73
9074          UI     102     109     119     118     120     118     118     100      99     106
9075          UI     101      73      77      80      57      53      47      41      41      40
9076          UI      27      24      23      20      18      18      14      12      13      13
9077          UI       8       8       8       8       8       7       2       2       1       2
              *

9078          KK  S33S51ROUTE
9079          KM        Cross-section: Ag field, assumed 0.5% side slopes
9080          KM        V-ditch / Manning's N Value: avg value for cultivated
9081          KM        areas from Estimated Manning's Roughness Coefficient
9082          KM        for Stream Channels and Flood Plains in MC
9083          RS      19    FLOW
9084          RC   0.038   0.038   0.038    3874  0.0005    0.00
9085          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9086          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9087          KK     S51BASIN
9088          KM        Boundary based on Aerial
9089          BA   0.124
9090          LG    0.46    0.17    6.80    0.19       6
9091          UI       0       8       9      15      28      47      48      63      68      72
9092          UI      72      68      60      64      49      49      38      32      25      26
9093          UI      18      14      13      11      10       7       8       5       5       4
9094          UI       5       1       1       1       1       1       1       1       1       2
9095          UI       1       1       1       1       1       1       1       1       0       0
              *

9096          KK   CPS51COMBINE
9097          HC       4  10.117
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9098          KK   SRS51STORAGE
9099          KM        Storage behind canal (WLB)
9100          KO
9101          RS       1    STOR
9102          SV            3.80   61.42   88.60  116.74  146.56  179.56
9103          SQ                            1011.00 3120.00 5732.00
9104          SE  890.20  892.00  894.00  894.50  895.00  895.50  899.00
9105          ST
              *

9106          KK  S51S54ROUTE
9107          KM        Cross-section: Ag field, assumed 0.5% side slopes
9108          KM        V-ditch / Manning's N Value: avg value for cultivated
```

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9109          KM        areas from Estimated Manning's Roughness Coefficient
9110          KM        for Stream Channels and Flood Plains in MC
9111          RS       5    FLOW
9112          RC   0.038   0.038   0.038    2654  0.0018    0.00
9113          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9114          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9115          KK     S52BASIN
9116          KM        BASIN BOUNDARY FROM 1990 TOPO
9117          KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
9118          BA   0.417
9119          LG    0.50    0.15    7.60    0.14       0
9120          UI       0      20      20      20      35      46      76     104     120     112
9121          UI     158     143     163     166     167     165     154     139     140     151
9122          UI     117     103     116      89      75      70      58      55      63      37
9123          UI      36      31      30      24      24      20      18      18      18      11
9124          UI      12      11      11      11       9       2       3       2       3       2
              *

9125          KK  S52S54ROUTE
9126          KM        Cross-section: side slopes, width based on aerial
9127          KM        and topo / Manning's N Value: clean straight earth
9128          KM        ag field ROB
9129          RS       4    FLOW
9130          RC   0.022   0.022   0.038    2643  0.0015    0.00
9131          RX  100.00  115.00  130.00  135.00  145.00  367.00  802.00 1237.00
9132          RY  886.00  885.00  884.00  882.00  882.10  884.00  885.00  886.00
              *

9133          KK     S54BASIN
9134          KM        BASIN BOUNDARY FROM 1990 TOPO
9135          BA   0.419
9136          LG    0.47    0.20    6.40    0.23       1
9137          UI       0      45      72     180     260     347     372     369     319     293
9138          UI     240     174     128     108      75      55      45      38      25      25
9139          UI      13       6       6       5       6       5       6       6       5       6
9140          UI       5       6       0       0       0       0       0       0       0       0
9141          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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

9142          KK   CPS54COMBINE
9143          HC       3  10.953
              *

9144          KK  S54S55ROUTE
9145          KM        Cross-section: Ag field, assumed 0.5% side slopes
9146          KM        V-ditch / Manning's N Value: avg value for cultivated
9147          KM        areas from Estimated Manning's Roughness Coefficient
9148          KM        for Stream Channels and Flood Plains in MC
9149          RS       9    FLOW
9150          RC   0.038   0.038   0.038    3902  0.0011    0.00
9151          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9152          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9153          KK     S53BASIN
9154          KM        BASIN BOUNDARY FROM 1990 TOPO
9155          BA   0.401
9156          LG    0.49    0.15    7.60    0.14       0
9157          UI       0      22      23      28      47      82     121     130     144     170
9158          UI     188     191     188     188     164     156     172     132     120     123
9159          UI      90      81      66      67      59      42      37      34      27      28
9160          UI      20      21      20      13      13      12      13      11       3       3
9161          UI       3       3       2       3       3       3       3       2       3       3
              *

9162          KK  S53S55ROUTE
9163          KM        Cross-section: Ag field, assumed 0.5% side slopes
9164          KM        V-ditch / Manning's N Value: avg value for cultivated
9165          KM        areas from Estimated Manning's Roughness Coefficient
9166          KM        for Stream Channels and Flood Plains in MC
9167          RS      12    FLOW
9168          RC   0.038   0.038   0.038    5277  0.0019    0.00
9169          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9170          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9171          KK     S55BASIN
9172          KM        BASIN BOUNDARY FROM 1990 TOPO
9173          BA   0.754
9174          LG    0.49    0.15    8.00    0.13       1
9175          UI       0      36      37      37      68      91     149     200     213     220
9176          UI     284     282     304     305     309     304     268     258     273     259
9177          UI     192     199     200     146     139     112     103     113      85      70
9178          UI      59      58      45      45      40      33      33      33      22      21
9179          UI      20      21      21      16       5       4       5       5       4       5
              *

9180          KK   CPS55COMBINE
9181          HC       3  12.108
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9182          KK  S55S74ROUTE
9183          KM        Cross-section: Ag field, assumed 0.5% side slopes
9184          KM        V-ditch / Manning's N Value: avg value for cultivated
9185          KM        areas from Estimated Manning's Roughness Coefficient
9186          KM        for Stream Channels and Flood Plains in MC
9187          RS      20    FLOW
9188          RC   0.038   0.038   0.038    8197  0.0010    0.00
9189          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9190          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9191          KK     S56BASIN
9192          KM        BASIN BOUNDARY FROM 1990 TOPO
9193          BA   0.606
9194          LG    0.43    0.25    4.00    0.64       5
9195          UI       0      50      58     120     235     288     364     417     419     416
9196          UI     351     382     260     270     195     152     151      97      80      65
9197          UI      56      46      41      28      29      28       7       6       7       6
9198          UI       6       6       7       6       6       6       7       6       6       6
```

```
9199        UI       7       0       0       0       0       0       0       0       0       0
            *

9200        KK  S56S57ROUTE
9201        KM        Cross-section: Ag field, assumed 0.5% side slopes
9202        KM        V-ditch / Manning's N Value: avg value for cultivated
9203        KM        areas from Estimated Manning's Roughness Coefficient
9204        KM        for Stream Channels and Flood Plains in MC
9205        RS       7    FLOW
9206        RC   0.038   0.038   0.038    5289  0.0072    0.00
9207        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9208        RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
            *

9209        KK     S57BASIN
9210        KM        BASIN BOUNDARY FROM 1990 TOPO
9211        BA   0.767
9212        LG    0.41    0.25    4.10    0.58       3
9213        UI       0      66      83     171     348     390     506     554     561     512
9214        UI     485     427     371     278     225     196     149     111      89      76
9215        UI      62      53      38      38      33       8       9       8       8       9
9216        UI       8       8       9       8       8       9       8       8       9       0
9217        UI       0       0       0       0       0       0       0       0       0       0
            *

9218        KK   CPS57COMBINE
9219        HC       2   1.373
            *

9220        KK  S57S58ROUTE
9221        KM        Cross-section: Ag field, assumed 0.5% side slopes
9222        KM        V-ditch / Manning's N Value: avg value for cultivated
9223        KM        areas from Estimated Manning's Roughness Coefficient
9224        KM        for Stream Channels and Flood Plains in MC
9225        RS       3    FLOW
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9226        RC   0.038   0.038   0.038    3501  0.0063    0.00
9227        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9228        RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
            *

9229        KK   DS48SRETRIEVE
9230        DR   DS48S
            *

9231        KK  S48S58ROUTE
9232        KM        Cross-section: Ag field, assumed 0.5% side slopes
9233        KM        V-ditch / Manning's N Value: avg value for cultivated
9234        KM        areas from Estimated Manning's Roughness Coefficient
9235        KM        for Stream Channels and Flood Plains in MC
9236        RS      23    FLOW
9237        RC   0.038   0.038   0.038    2870  0.0063    0.00
9238        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9239        RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
            *

9240        KK     S58BASIN
9241        KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
9242        BA   0.204
9243        LG    0.50    0.25    4.50    0.54       0
9244        UI       0      15      15      28      52      86      83     109     124     123
9245        UI     122     110     105      99      79      77      56      47      43      35
9246        UI      26      22      18      17      13      13       9       8       8       7
9247        UI       1       2       2       2       2       2       2       1       2       2
9248        UI       2       2       2       1       2       2       0       0       0       0
            *

9249        KK   CPS58COMBINE
9250        HC       3   5.534
            *

9251        KK   SRS58STORAGE
9252        KM        Storage behind UPRR (WLB)
9253        KO
9254        RS       1    STOR
9255        SV            0.19    0.54    3.31    7.74
9256        SQ          138.00  153.00 1483.00 3332.00
9257        SE  894.40  898.00  898.40  900.00  900.50
9258        ST
            *

9259        KK  S58S59ROUTE
9260        KM        Cross-section: Ag field, assumed 0.5% side slopes
9261        KM        V-ditch / Manning's N Value: avg value for cultivated
9262        KM        areas from Estimated Manning's Roughness Coefficient
9263        KM        for Stream Channels and Flood Plains in MC
9264        RS       6    FLOW
9265        RC   0.038   0.038   0.038    3138  0.0019    0.00
9266        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9267        RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
            *
```



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

9268        KK     S59BASIN
9269        KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
9270        KM        AND OVERTOPS BUCKEYE CANAL
9271        BA   0.165
9272        LG    0.42    0.29    4.70    0.40       3
9273        UI       0      25      70     142     192     207     173     142     102      72
9274        UI      43      32      22      16      13       4       3       3       3       3
9275        UI       3       3       3       0       0       0       0       0       0       0
9276        UI       0       0       0       0       0       0       0       0       0       0
9277        UI       0       0       0       0       0       0       0       0       0       0
            *

9278        KK   CPS59COMBINE
9279        HC       2   5.699
            *

9280        KK   SRS59STORAGE
9281        KM        Storage behind canal (WLB)
9282        KO
9283        RS       1    STOR
9284        SV            0.08   14.16   18.99   64.86
```

```
9285          SQ                          21.00 2267.00
9286          SE  889.90  890.00  891.70  892.00  894.00
9287          ST
              *

9288          KK  S59S74ROUTE
9289          KM        Cross-section: Ag field, assumed 0.5% side slopes
9290          KM        V-ditch / Manning's N Value: avg value for cultivated
9291          KM        areas from Estimated Manning's Roughness Coefficient
9292          KM        for Stream Channels and Flood Plains in MC
9293          RS      17    FLOW
9294          RC   0.038   0.038   0.038    8042  0.0030    0.00
9295          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9296          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9297          KK     S72BASIN
9298          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
9299          BA   0.401
9300          LG   0.48    0.15    8.80    0.09       2
9301          UI      0      20      20      21      40      56      91     122     108     134
9302          UI    155     171     170     168     172     159     140     148     156     107
9303          UI    109     113      81      78      62      57      64      43      37      33
9304          UI     30      25      25      19      19      18      15      12      11      12
9305          UI     11      11       3       2       3       2       3       2       3       2
              *

9306          KK  S72S73ROUTE
9307          KM        Cross-section: Ag field, assumed 0.5% side slopes
9308          KM        V-ditch / Manning's N Value: avg value for cultivated
9309          KM        areas from Estimated Manning's Roughness Coefficient
9310          KM        for Stream Channels and Flood Plains in MC
9311          RS       8    FLOW
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9312          RC   0.038   0.038   0.038    3142  0.0013    0.00
9313          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9314          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9315          KK     S73BASIN
9316          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
9317          BA   0.276
9318          LG   0.46    0.15    8.80    0.09       5
9319          UI      0      20      20      38      73     116     115     149     169     167
9320          UI    167     146     147     130     109     101      77      61      59      45
9321          UI     35      29      25      21      19      16      12      11      12       7
9322          UI      3       2       2       3       2       3       2       3       2       3
9323          UI      2       3       2       2       3       2       0       0       0       0
              *

9324          KK   CPS73COMBINE
9325          HC       2   0.677
              *

9326          KK  S73S74ROUTE
9327          KM        Cross-section: Ag field, assumed 0.5% side slopes
9328          KM        V-ditch / Manning's N Value: avg value for cultivated
9329          KM        areas from Estimated Manning's Roughness Coefficient
9330          KM        for Stream Channels and Flood Plains in MC
9331          RS      14    FLOW
9332          RC   0.038   0.038   0.038    5333  0.0011    0.00
9333          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9334          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9335          KK     S74BASIN
9336          KM        BASIN BOUNDARY FROM 1990 TOPO
9337          BA   1.608
9338          LG   0.48    0.15    7.30    0.16       1
9339          UI      0      57      57      57      57      97     119     162     231     298
9340          UI    359     302     330     415     432     468     476     485     475     475
9341          UI    484     462     397     403     401     432     407     297     299     332
9342          UI    302     231     218     212     170     164     161     183     131     108
9343          UI    101      93      92      75      71      70      67      52      52      52
              *

9344          KK   CPS74COMBINE
9345          HC       4  16.135
              *

9346          KK   DS741DIVERT
9347          KM        MC85 at Airport Road split flow
9348          DT  DS741W     0.0     0.0
9349          DI     0.0   332.5  1924.0  5255.7 11178.0     0.0     0.0     0.0     0.0     0.0
9350          DQ     0.0   142.5   854.3  2357.0  5037.5     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9351          KK   DS742DIVERT
9352          KM        MC85 at Airport Road split flow
9353          DT  DS742W     0.0     0.0
9354          DI     0.0   190.0  1069.7  2898.7  6140.5     0.0     0.0     0.0     0.0     0.0
9355          DQ     0.0    21.2    60.0   110.2   169.7     0.0     0.0     0.0     0.0     0.0
              *

9356          KK  S74S79ROUTE
9357          KM        Cross-section: Ag field, assumed 0.5% side slopes
9358          KM        V-ditch / Manning's N Value: avg value for cultivated
9359          KM        areas from Estimated Manning's Roughness Coefficient
9360          KM        for Stream Channels and Flood Plains in MC
9361          RS      11    FLOW
9362          RC   0.038   0.038   0.038    5186  0.0012    0.00
9363          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9364          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9365          KK     S79BASIN
9366          KM        BASIN BOUNDARY FROM 1990 TOPO
9367          BA   0.918
9368          LG   0.49    0.15    7.30    0.16       0
9369          UI      0      42      43      42      73      93     158     220     260     227
9370          UI    313     321     358     353     362     353     354     299     295     320
9371          UI    294     223     234     232     167     162     136     121     128     111
9372          UI     81      71      69      58      53      53      39      39      39      35
```

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9373          UI      24      25      24      24      24      17       5       6       5       5
              *

9374          KK   CPS79COMBINE
9375          HC       2  17.053
              *

9376          KK  S79S80ROUTE
9377          KM        Cross-section: Ag field, assumed 0.5% side slopes
9378          KM        V-ditch / Manning's N Value: avg value for cultivated
9379          KM        areas from Estimated Manning's Roughness Coefficient
9380          KM        for Stream Channels and Flood Plains in MC
9381          RS       7    FLOW
9382          RC   0.038   0.038   0.038    2679  0.0007    0.00
9383          RX  100.00  300.00  500.00  600.00  650.00  700.00  900.00 1100.00
9384          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9385          KK     S92BASIN
9386          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
9387          BA   0.689
9388          LG    0.49    0.15    8.40    0.11       0
9389          UI       0      35      35      34      70      98     157     208     186     232
9390          UI     267     293     292     291     295     273     242     255     265     183
9391          UI     190     193     139     134     105      98     110      72      64      57
9392          UI      51      43      43      33      32      32      25      20      20      20
9393          UI      19      19       4       4       5       4       4       5       4       4
              *
1                                          HEC-1 INPUT                                          PAGE236

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

9394          KK   DS741RETRIEVE
9395          DR  DS741W
              *

9396          KK  S74S92ROUTE
9397          KM        Cross-section: Ag field, assumed 0.5% side slopes
9398          KM        V-ditch / Manning's N Value: avg value for cultivated
9399          KM        areas from Estimated Manning's Roughness Coefficient
9400          KM        for Stream Channels and Flood Plains in MC
9401          RS       2    FLOW
9402          RC   0.038   0.038   0.038    1033  0.0010    0.00
9403          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9404          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9405          KK   CPS92COMBINE
9406          HC       2  16.824
              *

9407          KK  S92S80ROUTE
9408          KM        Cross-section: Ag field, assumed 0.5% side slopes
9409          KM        V-ditch / Manning's N Value: avg value for cultivated
9410          KM        areas from Estimated Manning's Roughness Coefficient
9411          KM        for Stream Channels and Flood Plains in MC
9412          RS      11    FLOW
9413          RC   0.038   0.038   0.038    5676  0.0014    0.00
9414          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9415          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9416          KK   DS742RETRIEVE
9417          DR  DS742W
              *

9418          KK  S74S80ROUTE
9419          KM        Cross-section: Ag field, assumed 0.5% side slopes
9420          KM        V-ditch / Manning's N Value: avg value for cultivated
9421          KM        areas from Estimated Manning's Roughness Coefficient
9422          KM        for Stream Channels and Flood Plains in MC
9423          RS      22    FLOW
9424          RC   0.038   0.038   0.038    5909  0.0010    0.00
9425          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9426          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9427          KK     S80BASIN
9428          KM        BASIN BOUNDARY FROM 1990 TOPO, PORTION OF SOUTHERN BOUNDARY
9429          KM        IS BOUNDED BY SUZY DEAN DITCH
9430          BA   0.435
9431          LG    0.43    0.25    5.00    0.39       5
9432          UI       0      22      23      22      47      66     106     135     120     167
9433          UI     168     190     187     189     191     165     156     170     151     117
9434          UI     130     107      85      78      65      66      60      43      37      36
9435          UI      28      28      24      20      21      18      12      13      13      13
1                                          HEC-1 INPUT                                          PAGE237

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

9436          UI      12       3       3       3       2       3       3       3       3       3
              *

9437          KK   CPS80COMBINE
9438          HC       4  18.177
              *

9439          KK     S90BASIN
9440          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
9441          BA   0.093
9442          LG    0.50    0.15    8.00    0.13       0
9443          UI       0       9      13      29      51      63      72      74      72      65
9444          UI      55      50      35      27      24      16      13      11       7       7
9445          UI       6       5       3       1       1       1       1       1       1       1
9446          UI       1       1       2       1       1       0       0       0       0       0
9447          UI       0       0       0       0       0       0       0       0       0       0
              *

9448          KK  S90S91ROUTE
9449          KM        Cross-section: Estimated 12' deep, side slopes and width based on
9450          KM        aerial and topo / Manning's N Value: clean straight earth
9451          RS       2    FLOW
9452          RC   0.022   0.022   0.022    2156  0.0009    0.00
9453          RX  100.00  115.00  130.00  150.00  162.00  182.00  192.00  202.00
9454          RY  868.20  868.10  868.00  856.00  856.10  868.00  868.10  868.20
              *

9455          KK     S91BASIN
9456          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
```

```
9457          KM        AND EXITS MODEL
9458          BA   0.215
9459          LG    0.43     0.14     8.40     0.10        5
9460          UI       0       15       16       32       57       92       91      119      131      132
9461          UI     131      113      115      100       86       76       60       46       47       32
9462          UI      27       23       19       16       14       12        9        9        9        4
9463          UI       2        2        2        2        2        2        2        2        2        2
9464          UI       2        2        2        1        2        2        0        0        0        0
              *

9465          KK   CPS91COMBINE
9466          HC       2   0.308
              *

9467          KK     S89BASIN
9468          KM        BASIN BOUNDARY FROM 1990 TOPO, EASTERN BOUNDARY
9469          KM        IS BOUNDED BY SUZY DEAN DITCH
9470          BA   0.197
9471          LG    0.46     0.15     8.80     0.09        1
9472          UI       0       16       15       34       67       89      105      119      130      129
9473          UI     116      111      105       82       78       57       45       46       30       25
9474          UI      20       18       14       14        9        8        9        5        2        2
9475          UI       2        2        2        2        2        2        2        1        2        2
9476          UI       2        2        2        0        0        0        0        0        0        0
              *
1                                                HEC-1 INPUT                                          PAGE238

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

9477          KK     S88BASIN
9478          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9479          BA   0.071
9480          LG    0.43     0.17     6.80     0.19        5
9481          UI       0        9       17       44       57       70       72       61       57       44
9482          UI      30       25       15       12        9        7        5        5        1        1
9483          UI       1        1        1        1        2        1        1        1        0        0
9484          UI       0        0        0        0        0        0        0        0        0        0
9485          UI       0        0        0        0        0        0        0        0        0        0
              *

9486          KK     S87BASIN
9487          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9488          BA   0.121
9489          LG    0.48     0.15     8.00     0.12        1
9490          UI       0        9        9       16       30       51       49       64       74       72
9491          UI      73       64       62       60       47       46       33       28       26       21
9492          UI      15       14       11       10        8        8        5        4        5        4
9493          UI       1        1        1        2        1        1        1        1        1        1
9494          UI       1        1        1        2        1        1        1        0        0        0
              *

9495          KK     S86BASIN
9496          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9497          BA   0.202
9498          LG    0.49     0.15     7.30     0.16        0
9499          UI       0       17       22       45       91      102      133      146      148      135
9500          UI     126      113       97       74       61       50       40       30       23       20
9501          UI      17       14       10       10        9        2        3        2        2        2
9502          UI       2        2        2        3        2        2        2        2        2        0
9503          UI       0        0        0        0        0        0        0        0        0        0
              *

9504          KK     S85BASIN
9505          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9506          BA   0.337
9507          LG    0.50     0.15     7.00     0.18        0
9508          UI       0       17       17       17       35       49       79      102       91      117
9509          UI     132      146      142      144      146      130      121      128      124       90
9510          UI      95       91       67       65       50       48       56       32       30       28
9511          UI      24       21       21       15       16       15       12        9       10       10
9512          UI      10        7        2        2        2        2        3        2        2        2
              *

9513          KK   DUMMYCOMBINE
9514          HC       4
              *

9515          KK   DUMMYCOMBINE
9516          HC       5
              *
1                                                HEC-1 INPUT                                          PAGE239

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

9517          KK     W59BASIN
9518          KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN
9519          KM        WOOD/PATEL 2006, NEW 2' CI TOPO OBTAINED 2008
9520          BA   0.168
9521          LG    0.32     0.34     4.10     0.48       13
9522          UI       0      143      468      391      171       77       29       13        0        0
9523          UI       0        0        0        0        0        0        0        0        0        0
9524          UI       0        0        0        0        0        0        0        0        0        0
9525          UI       0        0        0        0        0        0        0        0        0        0
9526          UI       0        0        0        0        0        0        0        0        0        0
              *

9527          KK  W59W60ROUTE
9528          KM        Cross-section: Estimated 2' deep and 4:1 side
9529          KM        slopes, width based on aerial / Manning's N
9530          KM        Value: earth w/ sparse trees and shrubs
9531          RS       1    FLOW
9532          RC   0.032   0.032   0.032     841  0.0006    0.00
9533          RX  100.00  102.00  104.00  112.00  122.00  130.00  140.00  300.00
9534          RY  1097.0 1096.25 1096.00 1094.00 1094.10 1096.00 1096.10 1097.00
              *

9535          KK     W61BASIN
9536          BA   0.389
9537          LG    0.33     0.34     4.15     0.46        6
9538          UI       0      341     1105      889      393      170       65       31        0        0
9539          UI       0        0        0        0        0        0        0        0        0        0
9540          UI       0        0        0        0        0        0        0        0        0        0
9541          UI       0        0        0        0        0        0        0        0        0        0
9542          UI       0        0        0        0        0        0        0        0        0        0
              *

9543          KK  DW61SEDIVERT
9544          KM        Divert culvert flows under I-10
```

```
9545          DT   DW61S     0.0     0.0
9546          DI     0.0   188.0  1000.0  2000.0  3000.0     0.0     0.0     0.0     0.0     0.0
9547          DQ     0.0   188.0   190.0   195.0   200.0     0.0     0.0     0.0     0.0     0.0
              *

9548          KK     W60BASIN
9549          KM        BASIN BOUNDARY FROM SIENNA HILLS AKA TESOTA HILLS
9550          KM        PRELIM DRAINAGE REPORT, CMX, 2006
9551          BA   0.161
9552          LG    0.34    0.35    3.95    0.40       5
9553          UI       0     136     443     374     168      75      29      13       0       0
9554          UI       0       0       0       0       0       0       0       0       0       0
9555          UI       0       0       0       0       0       0       0       0       0       0
9556          UI       0       0       0       0       0       0       0       0       0       0
9557          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9558          KK   CPW60COMBINE
9559          HC       3   0.718
              *

9560          KK   SRW60STORAGE
9561          KM        Storage behind I-10
9562          KO
9563          RS       1    STOR
9564          SV            0.23    2.30   11.40   29.80   51.60   51.60
9565          SQ           12.00   45.00  100.00  140.00  152.00 7400.00
9566          SE  1095.0 1096.00 1097.00 1098.00 1099.00 1100.00 1101.00
9567          ST
              *

9568          KK  W60S61ROUTE
9569          KM        Cross-section: Estimated 3' deep and 4:1 side
9570          KM        slopes, width based on aerial / Manning's N
9571          KM        Value: earth w/ sparse trees and shrubs
9572          RS       5    FLOW
9573          RC   0.032   0.032   0.032    3609  0.0094    0.00
9574          RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
9575          RY  1000.0  999.80  999.30  999.00  999.00  999.30  999.80 1000.00
              *

9576          KK     S61BASIN
9577          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9578          BA   0.234
9579          LG    0.26    0.31    4.15    0.51      20
9580          UI       0     223     701     522     217      91      33      19       0       0
9581          UI       0       0       0       0       0       0       0       0       0       0
9582          UI       0       0       0       0       0       0       0       0       0       0
9583          UI       0       0       0       0       0       0       0       0       0       0
9584          UI       0       0       0       0       0       0       0       0       0       0
              *

9585          KK   CPS61COMBINE
9586          HC       2   0.952
              *

9587          KK  S61S62ROUTE
9588          KM        Cross-section: Estimated 3' deep, side slopes
9589          KM        and width based on aerial and topo / Manning's
9590          KM        N Value: earth w/ sparse trees and shrubs
9591          RS       2    FLOW
9592          RC   0.032   0.032   0.032    2298  0.0070    0.00
9593          RX  100.00  120.00  140.00  170.00  194.00  224.00  244.00  264.00
9594          RY  1054.5 1054.30 1054.00 1051.00 1051.10 1054.00 1054.30 1054.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9595          KK     S62BASIN
9596          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9597          BA   0.132
9598          LG    0.33    0.34    4.20    0.44       3
9599          UI       0     108     357     309     142      62      26      10       0       0
9600          UI       0       0       0       0       0       0       0       0       0       0
9601          UI       0       0       0       0       0       0       0       0       0       0
9602          UI       0       0       0       0       0       0       0       0       0       0
9603          UI       0       0       0       0       0       0       0       0       0       0
              *

9604          KK   CPS62COMBINE
9605          HC       2   1.084
              *

9606          KK  S62S64ROUTE
9607          KM        Buckeye ADMP FCD Contract No 2004C058
9608          KM        Conceptual Design Plans for White Tanks
9609          KM        System dated April 2009
9610          RS       3    FLOW
9611          RC   0.045   0.045   0.045    5430  0.0077    0.00
9612          RX  100.00  112.00  119.00  126.00  139.00  146.00  153.00  165.00
9613          RY  1020.0 1018.30 1017.30 1016.30 1016.20 1017.30 1018.30 1020.00
              *

9614          KK     S63BASIN
9615          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9616          BA   0.599
9617          LG    0.19    0.27    4.20    0.55      23
9618          UI       0     169     656    1061    1062     695     408     241     149      85
9619          UI      42      29      29       0       0       0       0       0       0       0
9620          UI       0       0       0       0       0       0       0       0       0       0
9621          UI       0       0       0       0       0       0       0       0       0       0
9622          UI       0       0       0       0       0       0       0       0       0       0
              *

9623          KK  S63S64ROUTE
9624          KM        Cross-section: Estimated 2' deep and 4:1 side
9625          KM        slopes, width based on aerial / Manning's N Value
9626          KM        clean straight earth
9627          RS       1    FLOW
9628          RC   0.022   0.022   0.022    2415  0.0046    0.00
9629          RX  100.00  120.00  140.00  152.00  155.00  167.00  179.00  191.00
9630          RY  1013.5 1012.25 1012.00 1010.00 1010.10 1012.00 1012.50 1013.50
              *
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9631          KK     S64BASIN
9632          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9633          BA   0.475
9634          LG    0.35     0.35     4.25     0.42        0
9635          UI       0      100      395      674      790      634      400      257      162      101
9636          UI      64       38       20       20       21        0        0        0        0        0
9637          UI       0        0        0        0        0        0        0        0        0        0
9638          UI       0        0        0        0        0        0        0        0        0        0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9639          UI       0        0        0        0        0        0        0        0        0        0
              *

9640          KK   CPS64COMBINE
9641          HC       3    2.158
              *

9642          KK  S64S67ROUTE
9643          KM        Buckeye ADMP FCD Contract No 2004C058
9644          KM        Conceptual Design Plans for White Tanks
9645          KM        System dated April 2009
9646          RS       1     FLOW
9647          RC   0.045    0.045    0.045      828   0.0051     0.00
9648          RX  100.00   110.00   124.00   138.00   172.00   186.00   200.00   210.00
9649          RY  1116.0  1112.60  1112.60  1110.60  1110.50  1112.60  1114.60  1116.00
              *

9650          KK     S67BASIN
9651          KM        BASIN BOUNDARY FROM 1990 TOPO
9652          BA   0.159
9653          LG    0.28     0.28     4.25     0.45        2
9654          UI       0       72      273      361      250      133       69       36       18        9
9655          UI       9        0        0        0        0        0        0        0        0        0
9656          UI       0        0        0        0        0        0        0        0        0        0
9657          UI       0        0        0        0        0        0        0        0        0        0
9658          UI       0        0        0        0        0        0        0        0        0        0
              *

9659          KK   CPS67COMBINE
9660          HC       2    2.317
              *

9661          KK  S6768AROUTE
9662          KM        Cross-section: Buckeye ADMP FCD Contract
9663          KM        No 2004C058 Conceptual Design Plans for
9664          KM        White Tanks System dated April 2009
9665          RS       1     FLOW
9666          RC   0.045    0.045    0.045     2578   0.0067     0.00
9667          RX  100.00   137.50   151.50   165.50   199.50   213.50   227.50   265.00
9668          RY  1000.0   998.70   996.70   994.70   994.60   996.70   998.70  1000.00
              *

9669          KK  S6768BROUTE
9670          KM        Cross-section: Buckeye ADMP FCD Contract
9671          KM        No 2004C058 Conceptual Design Plans for
9672          KM        White Tanks System dated April 2009
9673          RS       1     FLOW
9674          RC   0.045    0.045    0.045     1876   0.0053     0.00
9675          RX  100.00   134.00   148.00   162.00   198.00   212.00   226.00   260.00
9676          RY  986.00   984.40   982.40   980.40   980.30   982.40   984.40   986.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9677          KK     S68BASIN
9678          KM        BASIN BOUNDARY FROM 1990 TOPO
9679          BA   0.338
9680          LG    0.32     0.25     4.20     0.54       13
9681          UI       0       34       54      130      194      258      290      289      255      250
9682          UI     186      157      114       99       64       50       41       32       26       19
9683          UI      20        7        4        4        5        4        4        4        5        4
9684          UI       4        5        4        0        0        0        0        0        0        0
9685          UI       0        0        0        0        0        0        0        0        0        0
              *

9686          KK   CPS68COMBINE
9687          HC       2    2.655
              *

9688          KK  S6869AROUTE
9689          KM        Cross-section: Buckeye ADMP FCD Contract
9690          KM        No 2004C058 Conceptual Design Plans for
9691          KM        White Tanks System dated April 2009
9692          RS       1     FLOW
9693          RC   0.045    0.045    0.045     2590   0.0068     0.00
9694          RX  100.00   104.50   118.50   132.50   157.50   171.50   185.50   190.00
9695          RY  960.00   959.40   957.40   955.40   955.30   957.40   959.40   960.00
              *

9696          KK  S6869BROUTE
9697          KM        Cross-section: Buckeye ADMP FCD Contract
9698          KM        No 2004C058 Conceptual Design Plans for
9699          KM        White Tanks System dated April 2009
9700          RS       1     FLOW
9701          RC   0.045    0.045    0.045     2590   0.0085     0.00
9702          RX  100.00   103.50   117.50   131.50   155.50   169.50   183.50   187.00
9703          RY  940.00   938.50   937.50   935.50   935.40   937.50   938.50   940.00
              *

9704          KK     S69BASIN
9705          KM        BASIN BOUNDARY FROM 1990 TOPO
9706          BA   0.468
9707          LG    0.38     0.25     4.00     0.69        8
9708          UI       0       36       36       75      152      208      232      283      305      297
9709          UI     282      254      264      188      195      137      112      108       79       61
9710          UI      51       45       34       33       25       20       21       19        5        4
9711          UI       5        4        5        4        4        5        4        5        4        5
9712          UI       4        5        4        5        0        0        0        0        0        0
              *

9713          KK   CPS69COMBINE
9714          HC       2    3.123
              *
```



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

```
9715          KK  S69S70ROUTE
9716          KM        Buckeye ADMP FCD Contract No 2004C058
9717          KM        Conceptual Design Plans for White Tanks
9718          KM        System dated April 2009
9719          RS       2    FLOW
9720          RC   0.045   0.045   0.045    3632  0.0078    0.00
9721          RX  100.00  122.00  136.00  150.00  172.00  186.00  200.00  222.00
9722          RY  910.00  909.60  907.60  905.60  905.50  907.60  909.60  910.00
              *

9723          KK     S70BASIN
9724          KM        BASIN BOUNDARY FROM 1990 TOPO, OVERTOPPING
9725          KM        LOCATION AT LOW PT (ELEV-896)
9726          BA   0.750
9727          LG    0.49    0.25    4.50    0.53       0
9728          UI       0      45      46      67     110     203     266     252     349     358
9729          UI     381     385     382     326     324     350     239     258     210     174
9730          UI     146     128     132      88      74      68      56      53      41      42
9731          UI      35      25      26      26      26       6       6       6       5       6
9732          UI       6       6       5       6       6       5       6       6       5       6
              *

9733          KK   CPS70COMBINE
9734          HC       2   3.873
              *

9735          KK  S70S71ROUTE
9736          KM        Buckeye ADMP FCD Contract No 2004C058
9737          KM        Conceptual Design Plans for White Tanks
9738          KM        System dated April 2009
9739          RS       2    FLOW
9740          RC   0.030   0.030   0.030    3443  0.0012    0.00
9741          RX  100.00  107.50  121.50  135.50  160.50  174.50  188.50  196.00
9742          RY  896.00  894.90  892.90  890.90  890.80  892.90  894.90  896.00
              *

9743          KK     S71BASIN
9744          KM        BASIN BOUNDARY FROM 1990 TOPO, PONDING AT BUCKEYE CANAL
9745          KM        AND AIRPORT ROAD RESULTING IN A SPLIT FLOW
9746          BA   0.130
9747          LG    0.43    0.25    4.65    0.44       5
9748          UI       0       9       9      18      32      54      51      68      78      78
9749          UI      76      71      65      66      49      51      36      32      26      24
9750          UI      17      15      11      11       9       8       6       6       5       6
9751          UI       1       1       1       2       1       1       1       1       1       1
9752          UI       2       1       1       1       1       1       1       0       0       0
              *

9753          KK   CPS71COMBINE
9754          HC       2   4.003
              *
```



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

9755          KK  S71S78ROUTE
9756          KM        Buckeye ADMP FCD Contract No 2004C058
9757          KM        Conceptual Design Plans for White Tanks
9758          KM        System dated April 2009
9759          RS       3    FLOW
9760          RC   0.030   0.030   0.030    3159  0.0005    0.00
9761          RX  100.00  117.50  131.50  145.50  181.50  195.50  209.50  227.00
9762          RY  894.00  891.50  889.50  887.50  887.40  889.50  891.50  894.00
              *

9763          KK     S78BASIN
9764          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
9765          KM        AND OVERTOPS BUCKEYE CANAL
9766          BA   0.176
9767          LG    0.48    0.25    4.70    0.46       4
9768          UI       0       8       8       8      15      19      31      43      51      45
9769          UI      64      60      69      69      70      69      66      58      58      61
9770          UI      54      43      48      40      32      31      25      23      25      19
9771          UI      16      13      13      10      10      10       7       7       8       5
9772          UI       5       5       5       5       4       2       1       1       1       1
              *

9773          KK   CPS78COMBINE
9774          HC       2   4.179
              *

9775          KK  DW61SERETRIEVE
9776          DR   DW61S
              *

9777          KK  W61S65ROUTE
9778          KM        Cross-section: Estimated 2' deep, side slopes
9779          KM        and width based on aerial and topo / Manning's
9780          KM        N Value: earth w/ sparse trees and shrubs
9781          RS      11    FLOW
9782          RC   0.032   0.032   0.032    9453  0.0077    0.00
9783          RX  100.00  135.00  170.00  186.00  336.00  352.00  372.00  392.00
9784          RY  1052.5 1052.30 1052.00 1050.00 1050.10 1052.00 1053.00 1054.00
              *

9785          KK     S65BASIN
9786          KM        BASIN BOUNDARY FROM 1990 TOPO
9787          BA   0.879
9788          LG    0.30    0.33    4.40    0.42       9
9789          UI       0     111     317     661     916    1064    1004     768     563     398
9790          UI     288     207     150     107      77      53      27      27      27      27
9791          UI       0       0       0       0       0       0       0       0       0       0
9792          UI       0       0       0       0       0       0       0       0       0       0
9793          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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

9794          KK   CPS65COMBINE
9795          HC       2   1.268
              *

9796          KK  S65S66ROUTE
9797          KM        Cross-section: Estimated 3' deep and 4:1 side
9798          KM        slopes, width based on aerial / Manning's N
```

```
9799          KM        Value: clean straight earth
9800          RS       6    FLOW
9801          RC   0.032   0.032   0.032    6405  0.0056    0.00
9802          RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
9803          RY  1000.5  999.75  999.25  999.00  999.10  999.25  999.75 1000.50
              *

9804          KK     S66BASIN
9805          KM        SUNDANCE, RBF, 2004
9806          BA   0.655
9807          LG    0.25    0.28    3.95    0.40      23
9808          UI       0     117     451     680    1102    1069     726     464     207     128
9809          UI      51      33      32       0       0       0       0       0       0       0
9810          UI       0       0       0       0       0       0       0       0       0       0
9811          UI       0       0       0       0       0       0       0       0       0       0
9812          UI       0       0       0       0       0       0       0       0       0       0
              *

9813          KK  DS66REDIVERT
9814          KM        Sundance
9815          DT    RS66    75.9     0.0
9816          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9817          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9818          KK   CPS66COMBINE
9819          HC       2   1.923
              *

9820          KK   SRS66STORAGE
9821          KM        Ponding behind road/canal, does not incl Sundance retention values
9822          KO
9823          RS       1    STOR
9824          SV   26.50   36.70   50.00
9825          SQ         1414.00 2600.00
9826          SE  1002.0 1003.00 1003.50
9827          ST
              *

9828          KK  S66S75ROUTE
9829          KM        Cross-section: Ag field, assumed 0.5% side slopes
9830          KM        V-ditch / Manning's N Value: avg value for cultivated
9831          KM        areas from Estimated Manning's Roughness Coefficient
9832          KM        for Stream Channels and Flood Plains in MC
9833          RS       3    FLOW
9834          RC   0.038   0.038   0.038    2958  0.0095    0.00
9835          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
```



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

9836          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9837          KK     S75BASIN
9838          KM        BASIN BOUNDARY FROM 1990 TOPO
9839          BA   0.339
9840          LG    0.46    0.25    4.00    0.66       1
9841          UI       0      22      22      36      58     105     128     134     169     181
9842          UI     182     186     166     152     166     124     120     105      83      67
9843          UI      64      58      40      35      30      27      22      19      20      12
9844          UI      13      12      13       4       3       3       2       3       3       2
9845          UI       3       3       2       3       3       2       3       3       3       2
              *

9846          KK   CPS75COMBINE
9847          HC       2   2.262
              *

9848          KK  S75S76ROUTE
9849          KM        Cross-section: Ag field, assumed 0.5% side slopes
9850          KM        V-ditch / Manning's N Value: avg value for cultivated
9851          KM        areas from Estimated Manning's Roughness Coefficient
9852          KM        for Stream Channels and Flood Plains in MC
9853          RS       6    FLOW
9854          RC   0.038   0.038   0.038    5281  0.0081    0.00
9855          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9856          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

9857          KK     S76BASIN
9858          KM        BASIN BOUNDARY FROM 1990 TOPO
9859          BA   1.006
9860          LG    0.50    0.25    4.15    0.67       0
9861          UI       0      52      53      52     109     153     247     312     277     398
9862          UI     384     440     437     436     441     381     363     395     344     272
9863          UI     305     240     196     180     151     155     134      98      85      83
9864          UI      64      64      54      47      48      41      29      30      30      29
9865          UI      27       6       7       6       7       6       7       6       7       6
              *

9866          KK   CPS76COMBINE
9867          HC       2   3.268
              *

9868          KK  S76S77ROUTE
9869          KM        Cross-section: Estimated 2' deep, side
9870          KM        slopes and width based on aerial / Manning's
9871          KM        N Value: clean straight earth
9872          RS       2    FLOW
9873          RC   0.022   0.022   0.022    7144  0.0052    0.00
9874          RX  100.00  103.00  106.00  116.00  148.00  158.00  178.00  198.00
9875          RY  900.00  899.00  898.00  896.00  896.10  898.00  898.10  898.20
              *
```



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

9876          KK     S77BASIN
9877          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
9878          BA   0.911
9879          LG    0.35    0.25    4.50    0.53      15
9880          UI       0      48      49      53     100     151     241     291     275     378
9881          UI     360     414     404     403     401     339     341     379     265     260
9882          UI     271     190     181     145     137     146      93      83      78      63
9883          UI      60      52      45      44      40      28      27      28      27      25
9884          UI       6       6       6       6       6       6       6       6       6       6
              *
```

```
9885          KK   CPS77COMBINE
9886          HC       2   4.179
              *
9887          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

   33        N07
              .
              .
   44         .-------> DN07AS
   42      DN07A
              .
              .
   49         .-------> DN07BS
   47      DN07B
              .
              .
   54         .-------> DN07CS
   52      DN07C
              .
              .
   59         .-------> DN07DS
   57      DN07D
              V
              V
   62     N07N06
              .
              .
   69         .        N01
              .          .
              .          .
   79         .          .        N02A
              .          .          V
              .          .          V
   90         .          .      N2AN01
              .          .          .
              .          .          .
   97         .      CPN01............
              .          V
              .          V
   99         .     N01N02
              .          .
              .          .
  107         .          .        N02
              .          .          .
              .          .          .
  119         .          .          .-------> RN02
  117         .          .      DN02RE
              .          .          .
              .          .          .
  122         .          .          .       N03A
              .          .          .         V
              .          .          .         V
  133         .          .          .     N3AN02
              .          .          .          .
              .          .          .          .
  139         .      CPN02........................
              .          V
              .          V
  141         .     N02N3B
              .          .
              .          .
  148         .          .        N03B
              .          .          .
              .          .          .
  160         .          .          .-------> RN03B
  158         .          .      DN3BRE
              .          .          .
              .          .          .
  163         .     CPN03B............
              .          V
              .          V
  165         .     N3BN04
              .          .
              .          .
  172         .          .        N04
              .          .          .
              .          .          .
  182         .          .          .        N03
              .          .          .          .
              .          .          .          .
  194         .          .          .          .-------> RN03
  192         .          .          .     DN03RE
              .          .          .          V
              .          .          .          V
  197         .          .          .     N03N04
              .          .          .          .
              .          .          .          .
  203         .          .          .          .       N04A
              .          .          .          .         V
              .          .          .          .         V
  214         .          .          .          .     N4AN04
              .          .          .          .          .
              .          .          .          .          .
  221         .          .          .          .          .       N04B
              .          .          .          .          .         V
              .          .          .          .          .         V
  230         .          .          .          .          .     N4BN04
              .          .          .          .          .          .
              .          .          .          .          .          .
  237         .      CPN04.............................................
              .          .
              .          .
  241         .          .-------> RN04
  239         .     DN04RE
              .          V
              .          V
  244         .     N04N05
              .          .
              .          .
  250         .          .        N05
              .          .          .
              .          .          .
  263         .          .          .-------> RN05
  259         .          .      DN05RE
```

```
267                  .<-------  DN07AS
266              DN07A
                     V
                     V
268              N7AN05

275                                .<-------  DN07BS
274                          DN07B
                                 V
                                 V
276                          N7BN05

283                                          .<-------  DN07CS
282                                    DN07C
                                           V
                                           V
284                                    N7CN05

290          CPN05.............................................
                 V
                 V
292          N05N06

299                  N06

308  CPN06.......................

310          N08

319                  N10
                       V
                       V
329                  N10N11

335                          N11

345                  CPN11............
                       V
                       V
347                  N11N09

354                          N09

363                                    N14

377                                        .------->    RN14
374                                    DN14RE

380                  CPN09........................
                       V
                       V
382                  N09N18

388                          N18

398                  CPN18............
                       V
                       V
400                  N18N15

406                          N12
                               V
                               V
416                      N12N13

422                                    N13

432                      CPN13............
                               V
                               V
434                      N13N15

440                                    N16
                                         V
                                         V
450                                    N16N15

456                                                 N15

466                  CPN15....................................
                       V
                       V
468                  N15N17

474                          N17

484                  CPN17............

486                          N20
                               V
                               V
495                      N20N21
```

```
502          .          .          .          .        N21
             .          .          .          .          .
             .          .          .          .          .
511          .          .          .     CPN21............
             .          .          .          .
             .          .          .          .
516          .          .          .          .-------->   DN21S
513          .          .          .    DN21SE
             .          .          .         V
             .          .          .         V
519          .          .          .    N21N25
             .          .          .          .
             .          .          .          .
526          .          .          .          .        N22
             .          .          .          .          .
             .          .          .          .          .
536          .          .          .          .          .          .<-------   DN21S
535          .          .          .          .          .     DN21SE
             .          .          .          .          .         V
             .          .          .          .          .         V
537          .          .          .          .          .     N21N22
             .          .          .          .          .          .
             .          .          .          .          .          .
544          .          .          .          .     CPN22............
             .          .          .          .         V
             .          .          .          .         V
546          .          .          .          .    N22N25
             .          .          .          .          .
             .          .          .          .          .
553          .          .          .          .          .        N25
             .          .          .          .          .          .
             .          .          .          .          .          .
563          .          .          .     CPN25........................
             .          .          .         V
             .          .          .         V
565          .          .          .    N25N26
             .          .          .          .
             .          .          .          .
572          .          .          .          .        N26
             .          .          .          .          .
             .          .          .          .          .
581          .          .          .     CPN26............
             .          .          .          .
             .          .          .          .
583          .          .          .          .        N19
             .          .          .          .          .
             .          .          .          .          .
593          .          .          .          .          .        N23
             .          .          .          .          .          V
             .          .          .          .          .          V
603          .          .          .          .          .     N23N24
             .          .          .          .          .          .
             .          .          .          .          .          .
610          .          .          .          .          .          .        N24
             .          .          .          .          .          .          .
             .          .          .          .          .          .          .
620          .          .          .          .          .     CPN24............
             .          .          .          .          .          .
             .          .          .          .          .          .
622          .          .          .          .          .          .        N27
             .          .          .          .          .          .          .
             .          .          .          .          .          .          .
631          .          .          .     DUMMY.................................
             .          .          .          .
             .          .          .          .
633     DUMMY...................................
             .
             .
635          .        D03
             .          .
             .          .
648          .          .-------->    RD03
644          .     DD03RE
             .          V
             .          V
651          .     D03D04
             .          .
             .          .
658          .          .         D04
             .          .          .
             .          .          .
674          .          .          .-------->    RD04
669          .          .     DD04RE
             .          .          .
             .          .          .
677          .      CPD04............
             .          .
             .          .
681          .          .-------->   DD04S
679          .     DD04SE
             .          V
             .          V
684          .     D04D05
             .          .
             .          .
691          .          .         D05
             .          .          .
             .          .          .
703          .          .          .-------->    RD05
701          .          .     DD05RE
             .          .          .
             .          .          .
706          .      CPD05............
             .          V
             .          V
708          .     D05D14
             .          .
             .          .
717          .          .-------->  DD141S
715          .      DD141
             .          V
             .          V
720          .     D05D15
             .          .
             .          .
727          .          .         D11
             .          .          .
             .          .          .
742          .          .          .-------->    RD11
737          .          .     DD11RE
```

```
                    .           .
                    .           .
747                 .           .-------> DD111S
745                 .       DD111
                    .           .
                    .           .
752                 .           .-------> DD112S
750                 .       DD112
                    .           V
                    .           V
755                 .      D11D12
                    .           .
                    .           .
762                 .           .        D12
                    .           .          .
                    .           .          .
778                 .           .          .-------> RD12
772                 .           .     DD12RE
                    .           .          .
                    .           .          .
781                 .       CPD12............
                    .           .
                    .           .
785                 .           .-------> DD121S
783                 .       DD121
                    .           .
                    .           .
790                 .           .-------> DD122S
788                 .       DD122
                    .           V
                    .           V
793                 .      D12D13
                    .           .
                    .           .
801                 .           .        D13
                    .           .          .
                    .           .          .
815                 .           .          .-------> RD13
810                 .           .     DD13RE
                    .           .          .
                    .           .          .
819                 .           .          .          .<------- DD04S
818                 .           .          .     DD04SE
                    .           .          .          V
                    .           .          .          V
820                 .           .          .     D04D13
                    .           .          .          .
                    .           .          .          .
827                 .       CPD13........................
                    .           .
                    .           .
831                 .           .-------> DD131S
829                 .       DD131
                    .           .
                    .           .
836                 .           .-------> DD132S
834                 .       DD132
                    .           V
                    .           V
839                 .      D13D14
                    .           .
                    .           .
846                 .           .        D14
                    .           .          .
                    .           .          .
857                 .           .          .-------> RD14
855                 .           .     DD14RE
                    .           .          .
                    .           .          .
861                 .           .          .          .<------- DD141S
860                 .           .          .      DD141
                    .           .          .          V
                    .           .          .          V
862                 .           .          .     D0514A
                    .           .          .          .
                    .           .          .          .
870                 .       CPD14........................
                    .           V
                    .           V
872                 .       SRD14
                    .           .
                    .           .
883                 .           .-------> DD142S
881                 .       DD142
                    .           V
                    .           V
886                 .      D14D15
                    .           .
                    .           .
893                 .           .        D15
                    .           .          .
                    .           .          .
902                 .     CPD15........................
                    .         V
                    .         V
904                 .     D15D26
                    .         V
                    .         V
911                 .     D15D28
                    .           .
                    .           .
918                 .           .     D28
                    .           .       .
                    .           .       .
927                 .     CPD28............
                    .         V
                    .         V
929                 .     D28AFR
                    .           .
                    .           .
935                 .           .     D26
                    .           .       .
                    .           .       .
947                 .           .-------> RD26
945                 .           .  DD26RE
                    .           .       .
                    .           .       .
951                 .           .       .<------- DD142S
950                 .           .   DD142
                    .           .       V
```

```
                                                  V
 952                                         D14D26
                                                  .
                                                  .
 959                                   CPD26............
                                           V
                                           V
 961                                   D26D27
                                                  .
                                                  .
 968                                         D27
                                                  .
                                                  .
 980                                              .------->    RD27
 978                                         DD27RE
                                                  .
                                                  .
 983                                   CPD27............
                                           V
                                           V
 985                                   SRD27
                                           V
                                           V
 993                                   D27D42
                                                  .
                                                  .
1001                                         D20
                                                  .
                                                  .
1015                                              .------->    RD20
1010                                         DD20RE
                                                  .
                                                  .
1019                                              .           .<-------  DD111S
1018                                              .       DD111
                                                  .           V
                                                  .           V
1020                                              .      D11D20
                                                  .           .
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1027                                          CPD20............
                                                  V
                                                  V
1029                                         D20D21
                                                  .
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1036                                              .         D21
                                                  .           .
                                                  .           .
1049                                              .           .------->    RD21
1045                                              .      DD21RE
                                                  .           .
                                                  .           .
1053                                              .           .           .<-------  DD112S
1052                                              .           .       DD112
                                                  .           .           V
                                                  .           .           V
1054                                              .           .      D11D21
                                                  .           .           .
                                                  .           .           .
1062                                              .           .           .           .<-------  DD121S
1061                                              .           .           .       DD121
                                                  .           .           .           V
                                                  .           .           .           V
1063                                              .           .           .      D12D21
                                                  .           .           .           .
                                                  .           .           .           .
1070                                          CPD21...................................
                                                  .
                                                  .
1074                                              .------->  DD211S
1072                                          DD211
                                                  .
                                                  .
1079                                              .------->  DD212S
1077                                          DD212
                                                  V
                                                  V
1082                                         D21D22
                                                  .
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1090                                              .         D22
                                                  .           .
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1103                                              .           .------->    RD22
1099                                              .      DD22RE
                                                  .           .
                                                  .           .
1107                                              .           .           .<-------  DD122S
1106                                              .           .       DD122
                                                  .           .           V
                                                  .           .           V
1108                                              .           .      D12D22
                                                  .           .           .
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1115                                          CPD22........................
                                                  V
                                                  V
1117                                         D22D23
                                                  .
                                                  .
1124                                              .         D23
                                                  .           .
                                                  .           .
1140                                              .           .------->    RD23
1133                                              .      DD23RE
                                                  .           .
                                                  .           .
1144                                              .           .           .<-------  DD131S
1143                                              .           .       DD131
                                                  .           .           V
                                                  .           .           V
1145                                              .           .      D13D23
                                                  .           .           .
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1152                                          CPD23........................
                                                  .
                                                  .
1156                                              .------->  DD231S
1154                                          DD231
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                                                  .
1161                                              .-------> DD232S
1159                                       DD232
                                                  V
                                                  V
1164                                       D23D24
                                                  .
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1172                                              .        D24
                                                  .          .
                                                  .          .
1183                                              .          .-------> RD24
1181                                              .     DD24RE
                                                  .          .
                                                  .          .
1187                                              .          .         .<-------  DD132S
1186                                              .          .     DD132
                                                  .          .         V
                                                  .          .         V
1188                                              .          .    D13D24
                                                  .          .         .
                                                  .          .         .
1195                                       CPD24.......................
                                                  V
                                                  V
1197                                       D24D25
                                                  .
                                                  .
1205                                              .        D25
                                                  .          .
                                                  .          .
1218                                              .          .-------> RD25
1214                                              .     DD25RE
                                                  .          .
                                                  .          .
1221                                       CPD25............
                                                  V
                                                  V
1223                                       D25D39
                                                  .
                                                  .
1230                                              .        D39
                                                  .          .
                                                  .          .
1239                                       CPD39............
                                                  V
                                                  V
1241                                       D39D42
                                                  .
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1249                                              .        D42
                                                  .          .
                                                  .          .
1262                                              .          .-------> RD42
1259                                              .     DD42RE
                                                  .          .
                                                  .          .
1265                                  CPD42........................
                                          V
                                          V
1267                                  SRD42
                                          V
                                          V
1275                                 D42D53
                                          .
                                          .
1283                                      .        D53
                                          .          .
                                          .          .
1294                                      .          .-------> RD53
1292                                      .     DD53RE
                                          .          .
                                          .          .
1297                                  CPD53............
                                          V
                                          V
1299                                  SRD53
                                          V
                                          V
1307                                 D53D54
                                          .
                                          .
1315                                      .        D43
                                          .          .
                                          .          .
1326                                      .          .-------> RD43
1324                                      .     DD43RE
                                          .          V
                                          .          V
1329                                      .     D43D54
                                          .          .
                                          .          .
1336                                      .          .        D54
                                          .          .          .
                                          .          .          .
1349                                      .          .          .-------> RD54
1346                                      .          .     DD54RE
                                          .          .          .
                                          .          .          .
1352                                  CPD54........................
                                          .
                                          .
1354                                      .        D44
                                          .          .
                                          .          .
1367                                      .          .-------> RD44
1365                                      .     DD44RE
                                          .          .
                                          .          .
1370                                      .          .        D55
                                          .          .          .
                                          .          .          .
1381                                      .          .          .-------> RD55
1379                                      .          .     DD55RE
                                          .          .          .
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1384                                      .          .          .        D56
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1396                                                  .------->   RD56
1393                                            DD56RE
1399                                   DUMMY.....................................

1401                   DUMMY........................

1403                        D52

1415                        .------->   RD52
1413                   DD52RE
                            V
                            V
1418                   D52D66

1426                        D66

1435                    CPD66............
                            V
                            V
1437                   D66D67

1444                        D67

1454                    CPD67............

1456                        D76
                            V
                            V
1466                       D76D77

1474                                         D77

1483                       CPD77............

1485                   DUMMY........................

1487                        D35

1497                                   .<-------  DD231S
1496                       DD231
                            V
                            V
1498                       D23D35

1505                    CPD35............

1509                        .------->   DD35S
1507                   DD35SE
                            V
                            V
1512                   D35D38

1519                        D38

1529                                         .<-------  DD232S
1528                                     DD232
                                             V
                                             V
1530                                    D23D38

1537                    CPD38........................
                            V
                            V
1539                   D38D40

1546                        D32

1559                                   .------->   RD32
1555                       DD32RE

1564                                   .------->   DD32S
1562                       DD32SE
                            V
                            V
1567                       D32D33

1574                                         D31

1588                                         .------->   RD31
1583                                    DD31RE

1592                                                 .<-------  DD211S
1591                                                    DD211
                                                         V
                                                         V
1593                                                   D21D31

1601                                    CPD31............
                                             V
                                             V
1603                                    D31D33
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1610                                                D33
                                                     .
1621                                                 .-------->   RD33
1619                                            DD33RE
                                                     .
1624                        CPD33.......................
                                 .
1628                             .-------> DD331S
1626                        DD331
                                 .
1633                             .-------> DD332S
1631                        DD332
                                 V
                                 V
1636                       D33D34
                                 .
1643                                   D34
                                         .
1655                                     .-------->   RD34
1652                                DD34RE
                                         .
1659                                     .<-------  DD212S
1658                                 DD212
                                         V
                                         V
1660                                D21D34
                                         .
1667                        CPD34.......................
                                 V
                                 V
1669                       D34D36
                                 .
1676                                   D36
                                         .
1688                                     .-------->   RD36
1685                                DD36RE
                                         .
1692                                     .<-------  DD35S
1691                                 DD35SE
                                         V
                                         V
1693                                D35D36
                                         .
1700                        CPD36.......................
                                 .
1704                             .-------> DD361S
1702                        DD361
                                 .
1709                             .-------> DD362S
1707                        DD362
                                 V
                                 V
1712                       D36D40
                                 .
1719                                   D40
                                         .
1728                   CPD40.......................
                            V
                            V
1730                   D4049A
                            V
                            V
1737                   D4049B
                            .
1744                       D47
                            .
1757                       .-------->   RD47
1753                  DD47RE
                            .
1761                                     .<-------  DD32S
1760                            DD32SE
                                     V
                                     V
1762                            D3247A
                                     V
                                     V
1769                            D3247B
                                     .
1777                                     .<-------  DD331S
1776                                 DD331
                                         V
                                         V
1778                                D3347A
                                         V
                                         V
1785                                D3347B
                                         .
1792                        CPD47.......................
                                 .
1796                             .-------> DD47S
1794                       DD47SE
                                 V
                                 V
1799                       D47D48
                                 .
1806                                   D48
                                         .
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1818                                  .------->    RD48
1815                            DD48RE
                                      .
                                      .
1822                                  .<-------  DD332S
1821                                  .      DD332
                                      .          V
                                      .          V
1823                                  .     D33D48
                                      .          .
                                      .          .
1831                                  .          .<-------  DD361S
1830                                  .       DD361
                                      .          V
                                      .          V
1832                                  .      D3648A
                                      .          V
                                      .          V
1839                                  .      D3648B
                                      .          .
                                      .          .
1846                        CPD48.................................
                                      .
                                      .
1850                                  .------->  DD481S
1848                        DD481
                                      .
                                      .
1855                                  .------->  DD482S
1853                        DD482
                                  V
                                  V
1858                       D48D49
                                      .
                                      .
1865                                  .        D49
                                      .          .
                                      .          .
1878                                  .------->    RD49
1874                            DD49RE
                                      .
                                      .
1882                                  .<-------  DD362S
1881                                  .      DD362
                                      .          V
                                      .          V
1883                                  .     D36D49
                                      .          .
                                      .          .
1890                  CPD49.................................
                          V
                          V
1892                  D49D63
                                      .
                                      .
1899                                  .        D60
                                      .          .
                                      .          .
1910                                  .<-------  DD481S
1909                                  .      DD481
                                      .          V
                                      .          V
1911                                  .     D48D60
                                      .          .
                                      .          .
1919                        CPD60...........
                                  V
                                  V
1921                       D60D63
                                      .
                                      .
1928                                  .        D63
                                      .          .
                                      .          .
1940                                  .<-------  DD482S
1939                                  .      DD482
                                      .          V
                                      .          V
1941                                  .     D48D63
                                      .          .
                                      .          .
1948                  CPD63.................................
                          V
                          V
1950                  SRD63
                          V
                          V
1958                  D63D64
                                      .
                                      .
1965                                  .        D62
                                      .          .
                                      .          .
1977                                  .------->  DD621S
1975                        DD621
                                      .
                                      .
1982                                  .------->  DD622S
1980                        DD622
                                  V
                                  V
1985                       D62D64
                                      .
                                      .
1994                                  .        D64
                                      .          .
                                      .          .
2003                  CPD64......................
                          V
                          V
2005                  D64D74
                                      .
                                      .
2012                                  .       D73A
                                      .          .
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2022                                  .<-------  DD621S
2021                                  .      DD621
                                      .          V
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                                                V
2023                                        D6273A
                                                .
                                                .
2030                                CPD73A............
                                          V
                                          V
2032                                D73A74
                                          .
                                          .
2039                                            D74
                                                .
                                                .
2049                                            .<-------  DD622S
2048                                            .      DD622
                                                .          V
                                                .          V
2050                                            .     D62D74
                                                .          .
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2058                        CPD74.................................
                                V
                                V
2060                        SRD74
                                .
                                .
2068                                  D78A
                                          .
                                          .
2077                        CPD78A............
                                V
                                V
2079                        D78ACP
                                .
                                .
2086                                    D41
                                          V
                                          V
2095                                D41D50
                                          .
                                          .
2102                                            D50
                                          .
                                          .
2111                                 CPD50............
                                          V
                                          V
2113                                D5064A
                                          .
                                          .
2120                                           D64A
                                          .
                                          .
2129                                CPD64A............
                                          V
                                          V
2131                                64A74A
                                          .
                                          .
2138                                           D74A
                                          .
                                          .
2147                                CPD74A............
                                          V
                                          V
2149                                D74A78
                                          .
                                          .
2156                        CP7874............
                                V
                                V
2158                        78A78B
                                .
                                .
2165                                    D06
                                          .
                                          .
2176                                      .------->    RD06
2174                                DD06RE
                                          .
                                          .
2182                                      .------->   DD06S
2179                                DD06SE
                                          V
                                          V
2185                                D06D07
                                          .
                                          .
2193                                            D07
                                          .
                                          .
2204                                            .------->    RD07
2202                                           DD07RE
                                          .
                                          .
2207                                 CPD07............
                                          V
                                          V
2209                                D07D02
                                          .
                                          .
2216                                            D01
                                          .
                                          .
2227                                            .------->    RD01
2225                                           DD01RE
                                          .          V
                                          .          V
2230                                           D01D02
                                          .          .
                                          .          .
2237                                            .         D02
                                          .          .
                                          .          .
2248                                            .          .------->    RD02
2246                                            .     DD02RE
                                          .          .
                                          .          .
2251                                 CPD02........................
                                          V
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                                  V
2253                          D02D10
                                  .
2261                                  D09
                                      .
2272                                  .-------->    RD09
2270                              DD09RE
                                      V
                                      V
2275                              D09D10
                                      .
2283                                  .<--------   DD06S
2282                                  .      DD06SE
                                      .          V
                                      .          V
2284                                  .      D06D10
                                      .          .
2290                                  .          .         D10
                                      .          .          .
2305                                  .          .          .-------->    RD10
2300                                  .          .      DD10RE
                                      .          .          .
2308                          CPD10.................................
                                  V
                                  V
2310                          D10D19
                                  .
2318                                  D08
                                      .
2332                                  .-------->    RD08
2327                              DD08RE
                                      V
                                      V
2335                              D08D16
                                      .
2342                                  .         D16
                                      .          .
2353                               CPD16............
                                      .
2357                                  .-------->  DD161S
2355                               DD161
                                      .
2362                                  .-------->  DD162S
2360                               DD162
                                      V
                                      V
2365                              D16D18
                                      .
2372                                  .         D18
                                      .          .
2383                                  .          .-------->    RD18
2381                                  .      DD18RE
                                      .          .
2386                               CPD18............
                                      V
                                      V
2388                              D18D19
                                      .
2395                                  .         D17
                                      .          .
2407                                  .          .-------->    RD17
2404                                  .      DD17RE
                                      .          V
                                      .          V
2410                                  .      D17D19
                                      .          .
2418                                  .          .         D19
                                      .          .          .
2435                                  .          .          .-------->    RD19
2427                                  .          .      DD19RE
                                      .          .          .
2438                          CPD19.................................
                                  V
                                  V
2440                          D19D30
                                      .
2447                                  D29
                                      .
2458                                  .          .<--------  DD161S
2457                                  .       DD161
                                      .          V
                                      .          V
2459                                  .      D16D29
                                      .          .
2466                               CPD29............
                                      V
                                      V
2468                              D29D30
                                      .
2475                                  .         D30
                                      .          .
2487                                  .          .          .<--------  DD162S
2486                                  .        DD162
                                      .          V
                                      .          V
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2488                                                  D16D30
2495                  CPD30.................................
                          V
                          V
2497                  D30D46
2504                                D45
2517                                  .------->    RD45
2514                            DD45RE
2522                                  .------->  DD451S
2520                             DD451
2527                                  .------->  DD452S
2525                             DD452
                                    V
                                    V
2530                            D45D46
2537                                          D46
2550                                            .------->    RD46
2547                                        DD46RE
2553                  CPD46......................
                          V
                          V
2555                  D46D58
2564                  .------->  SSPILL
2562                  RMSBSN
2568                                  .<-------  SSPILL
2567                            RMSBSN
                                    V
                                    V
2569                            SRREEM
2577                  CPRMS............
                          V
                          V
2579                   RRMS
2585                                D57
2596                                          .<-------  DD451S
2595                                       DD451
                                              V
                                              V
2597                                       D45D57
2604                             CPD57............
                                    V
                                    V
2606                            D57D58
2613                                          D58
2624                                                    .<-------  DD452S
2623                                                 DD452
                                                        V
                                                        V
2625                                                D45D58
2632                  CPD58.................................
                          V
                          V
2634                  D5869A
2641                                D68A
                                    V
                                    V
2650                            68A69A
2657                                          D69A
2666                  CPD69A......................
                          V
                          V
2668                  D69A70
2676                                D68
2688                                  .------->  DD681S
2686                             DD681
2693                                  .------->  DD682S
2691                             DD682
                                    V
                                    V
2696                            D68D69
2703                                          D69
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2712                CPD69............
                        .
2716                    .-------> DD691S
2714                DD691
                        .
2721                    .-------> DD692S
2719                DD692
                        V
                        V
2724               D69D70
                        .
                        .
2731                    .        D70
                        .         .
2740                    .         .       D70A
                        .         .         V
                        .         .         V
2749                    .         .      D70A70
                        .         .          .
                        .         .          .
2756          CPD70.................................
                  V
                  V
2758          SRD70
                  V
                  V
2766         D70D71
                  .
                  .
2774                 D71
                     .
                     .
2783          CPD71............
                  V
                  V
2785         D71D72
                  .
                  .
2793                 D59
                     .
                     .
2804                 .          .<-------   DD47S
2803                 .      DD47SE
                     .          V
                     .          V
2805                 .      D47D59
                     .          .
                     .          .
2812                CPD59............
                        .
                        .
2816                    .-------> DD59S
2814               DD59SE
                        V
                        V
2819               D59D61
                        .
                        .
2826                    .        D61
                        .         .
                        .         .
2836                CPD61............
                        V
                        V
2838               D6172A
                        .
                        .
2845                    .       D71A
                        .         .
                        .         .          .<-------   DD59S
2855                    .         .
2854                    .         .      DD59SE
                        .         .         V
                        .         .         V
2856                    .         .      D5971A
                        .         .          .
                        .         .          .
2863                    .      CPD71A............
                        .         V
                        .         V
2865                    .      71A72A
                        .         .
                        .         .
2872                    .         .       D72A
                        .         .         .
                        .         .         .
2881                CPD72A........................
                        V
                        V
2883               D72A72
                        .
                        .
2890                    .        D72
                        .         .
                        .         .
2901          CPD72........................
                  V
                  V
2903         D72D73
                  .
                  .
2911                 D73
                     .
                     .
2920          CPD73............
                  V
                  V
2922         D73D78
                  .
                  .
2930                 B02
                     .
                     .
2941                 .------->   RB02
2939          DB02RE
                     .
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2947                                  .-------> DB02LR
2944                          DB02SD

2950                                     B04

2964                                     .------->    RB04
2960                          DB04RE
                                  V
                                  V
2967                          B04B02

2975                                              .<-------  DB02LR
2974                                      DB02SD
                                                     .
2976                                       CPB02............
                                                     .
2981                                     .-------> LR02LR
2978                          LR02SD
                                  V
                                  V
2984                          LR2D78

2993                                          D78B
                                                     .
3002                  CPD78B..............................................
                          V
                          V
3004                  78B79B
                          .
3013                          D51
                              .
3024                          .------->    RD51
3022                      DD51RE
                              V
                              V
3027                      D51D65
                              .
3034                              D65
                                  .
3043                       CPD65............
                              V
                              V
3045                      D65D75
                              .
3053                              D79A
                                  .
3062                                     D75
                                  .          .
3072                       CPD75........................
                              V
                              V
3074                       SRD75
                              V
                              V
3083                      D7579B
                              .
3090                              D79B
                                  .
3100                  CPD79B........................
                          V
                          V
3102                  D79B80
                          .
3110                          D80
                              .
3119                   CPD80............
                          .
3121                          B01
                              .
3131          DUMMY........................

3133                   B03
                          V
                          V
3143                  B03B05
                          .
3149                          B05
                              .
3159                   CPB05............
                          V
                          V
3161                  B05B06
                          .
3168                          B06
                              .
3177                   CPB06............
                          V
                          V
3179                  B06B15
                          .
3186                          B07
                              .
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3199                    .------->    RB07
3196                DB07RE
                        V
                        V
3202                B07B09
                        .
                        .
3209                    .        B08
                        .          V
                        .          V
3219                    .     B08B09
                        .          .
                        .          .
3226                    .          .        B09
                        .          .          .
                        .          .          .
3239                    .          .          .------->    RB09
3235                    .          .     DB09RE
                        .          .          .
                        .          .          .
3242                CPB09.......................
                        V
                        V
3244                SRB11
                        V
                        V
3253                B09B11
                        .
                        .
3260                    .        B10
                        .          V
                        .          V
3269                    .     B1011A
                        .          V
                        .          V
3276                    .     B1011B
                        .          .
                        .          .
3283                    .          .        B11
                        .          .          .
                        .          .          .
3296                    .          .          .------->    RB11
3292                    .          .     DB11RE
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3299                CPB11.......................
                        V
                        V
3301                B11B12
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3308                    .        B12
                        .          .
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3320                    .          .------->    RB12
3318                    .     DB12RE
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                        .          .
3323                CPB12............
                        V
                        V
3325                B12B14
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3332                    .        B13
                        .          V
                        .          V
3342                    .     B13B14
                        .          .
                        .          .
3349                    .          .        B14
                        .          .          .
                        .          .          .
3362                    .          .          .------->    RB14
3358                    .          .     DB14RE
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3365                CPB14.......................
                        V
                        V
3367                B14B15
                        .
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3374                    .        B15
                        .          .
                        .          .
3383            CPB15.......................
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3385                B16
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3396                    .------->    RB16
3394                DB16RE
                        V
                        V
3399                B16B17
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3406                    .        B17
                        .          .
                        .          .
3418                    .          .------->    RB17
3416                    .     DB17RE
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3421                CPB17............
                        V
                        V
3423                B17B18
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3430                    .        B18
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3442                    .          .------->    RB18
3440                    .     DB18RE
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3445                CPB18............
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                 .          .          V
                 .          .          V
3447             .          .     B18B19
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3454             .          .          .         B19
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3463             .          .     CPB19............
                 .          .          .
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3465             .          .          .         B20
                 .          .          .           .
                 .          .          .           .
3474        DUMMY.................................
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3476             .        B21
                 .          .
                 .          .
3487             .          .-------->    RB21
3485             .     DB21RE
                 .          V
                 .          V
3490             .     B21B22
                 .          .
                 .          .
3497             .          .        B22
                 .          .          .
                 .          .          .
3506             .     CPB22............
                 .          .
                 .          .
3508             .          .        B23
                 .          .          .
                 .          .          .
3520             .          .          .-------->    RB23
3517             .          .     DB23RE
                 .          .          V
                 .          .          V
3523             .          .     B23B24
                 .          .          .
                 .          .          .
3530             .          .          .         B24
                 .          .          .           .
                 .          .          .           .
3542             .          .          .           .-------->    RB24
3539             .          .          .      DB24RE
                 .          .          .           .
                 .          .          .           .
3545             .          .     CPB24............
                 .          .          V
                 .          .          V
3547             .          .     B24B25
                 .          .          .
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3554             .          .          .         B25
                 .          .          .           .
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3563             .          .     CPB25............
                 .          .          .
                 .          .          .
3565             .          .          .         B26
                 .          .          .           .
                 .          .          .           .
3578             .          .          .           .-------->    RB26
3574             .          .          .      DB26RE
                 .          .          .           V
                 .          .          .           V
3581             .          .          .      B26B27
                 .          .          .           .
                 .          .          .           .
3588             .          .          .           .         B27
                 .          .          .           .           .
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3597             .          .          .      CPB27............
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3599        DUMMY.................................
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3601             .        B76
                 .          .
                 .          .
3612             .          .-------->    RB76
3610             .     DB76RE
                 .          V
                 .          V
3615             .     B7676A
                 .          .
                 .          .
3622             .          .        B75
                 .          .          .
                 .          .          .
3635             .          .          .-------->    RB75
3631             .          .     DB75RE
                 .          .          V
                 .          .          V
3638             .          .     B75A75
                 .          .          .
                 .          .          .
3645             .          .          .         B75A
                 .          .          .           .
                 .          .          .           .
3654             .          .     CPB75A...........
                 .          .          V
                 .          .          V
3656             .          .     B7576A
                 .          .          .
                 .          .          .
3663             .          .          .         B76A
                 .          .          .           .
                 .          .          .           .
3672             .     CPB76A......................
                 .          V
                 .          V
3674             .     B76A78
                 .          .
                 .          .
3682             .          .        B77
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3694            .          .          .-------->    RB77
3691            .          .     DB77RE
                .          .          V
                .          .          V
3697            .          .     B77B78
                .          .          .
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3704            .          .          .         B78
                .          .          .           .
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3715            .          .          .           .-------->    RB78
3713            .          .          .      DB78RE
                .          .          .           .
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3718            .          .     CPB78A............
                .          .          .
                .          .          .
3723            .          .          .-------->  RB78BN
3720            .          .     DB78BN
                .          .          .
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3726            .     CPB78B............
                .          V
                .          V
3728            .     B78B79
                .          .
                .          .
3735            .          .         B79
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3747            .          .          .-------->    RB79
3745            .          .     DB79RE
                .          .          .
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3750            .      CPB79............
                .          V
                .          V
3752            .     B79B80
                .          .
                .          .
3759            .          .         B80
                .          .          .
                .          .          .
3770            .          .          .-------->    RB80
3768            .          .     DB80RE
                .          .          .
                .          .          .
3773            .      CPB80............
                .          V
                .          V
3775            .      SRB80
                .          V
                .          V
3783            .     B80B81
                .          .
                .          .
3790            .          .         B81
                .          .          .
                .          .          .
3801            .          .          .-------->    RB81
3799            .          .     DB81RE
                .          .          .
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3804            .      CPB81............
                .          V
                .          V
3806            .      SRB81
                .          V
                .          V
3814            .     B81B84
                .          .
                .          .
3822            .          .         B82
                .          .          .
                .          .          .
3833            .          .          .-------->    RB82
3831            .          .     DB82RE
                .          .          V
                .          .          V
3836            .          .     B82B83
                .          .          .
                .          .          .
3843            .          .          .         B83
                .          .          .           .
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3854            .          .          .           .-------->    RB83
3852            .          .          .      DB83RE
                .          .          .           .
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3857            .          .      CPB83............
                .          .          V
                .          .          V
3859            .          .      SRB83
                .          .          V
                .          .          V
3867            .          .     B83B84
                .          .          .
                .          .          .
3874            .          .          .         B71
                .          .          .           .
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3888            .          .          .           .-------->    RB71
3884            .          .          .      DB71RE
                .          .          .           V
                .          .          .           V
3891            .          .          .     B71B72
                .          .          .           .
                .          .          .           .
3898            .          .          .           .         B72
                .          .          .           .           .
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3909            .          .          .           .           .-------->    RB72
3907            .          .          .           .      DB72RE
                .          .          .           .           .
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3912            .          .          .       CPB72............
                .          .          .           V
                .          .          .           V
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3914                                B72B74
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3921                                  .        B73
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3932                                  .         .-------->    RB73
3930                                  .     DB73RE
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                                      .         V
3935                                  .      SRB73
                                      .         V
                                      .         V
3943                                  .     B73B74
                                      .         .
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3950                                  .         .        B74
                                      .         .         .
3961                                  .         .         .-------->    RB74
3959                                  .         .     DB74RE
                                      .         .         .
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3964                                  .   CPB74.......................
                                      .      V
                                      .      V
3966                                  .   SRB74
                                      .      V
                                      .      V
3974                                  .   B74B84
                                      .         .
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3981                                  .         .        B84
                                      .         .         .
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3992                                  .         .         .-------->    RB84
3990                                  .         .     DB84RE
                                      .         .         .
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3995                          CPB84.................................
                                 V
                                 V
3997                          SRB84
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4006                                 .     B28
                                     .      .
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4017                                 .      .-------->    RB28
4015                                 .  DB28RE
                                     .      .
                                     .      .
4020                                 .         .     B29
                                     .         .      .
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4034                                 .         .      .-------->    RB29
4030                                 .      DB29RE
                                     .         .
                                     .         .
4037                                 .         .        B30
                                     .         .         .
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4050                                 .         .         .-------->    RB30
4046                                 .         .     DB30RE
                                     .         .         V
                                     .         .         V
4053                                 .         .      SRB30
                                     .         .         .
                                     .         .         .
4061                                 .         .         .        B31
                                     .         .         .         .
                                     .         .         .         .
4075                                 .         .         .         .-------->    RB31
4070                                 .         .         .     DB31RE
                                     .         .         .         V
                                     .         .         .         V
4078                                 .         .         .      SRB31
                                     .         .         .         .
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4086                                 .         .         .   DUMMY............
                                     .         .         .         .
4088                      DUMMY...................................
                                 .
4090                          B32
                                 .
                                 .
4106                             .-------->    RB32
4101                          DB32RE
                                 V
                                 V
4109                          SRB32
                                 V
                                 V
4117                          B32B33
                                 .
                                 .
4124                                 .     B33
                                     .      .
                                     .      .
4136                                 .      .-------->    RB33
4133                                 .  DB33RE
                                     .      .
                                     .      .
4139                          CPB33............
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                                 .
4141                                 .     B34
                                     .      .
                                     .      .
4150                                 .         .     B38
                                     .         .      .
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4161                                 .         .      .-------->    RB38
4159                                 .      DB38RE
                                     .         V
                                     .         V
4164                                 .      B38B39
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4171                                                B37
                                                     V
                                                     V
4180                                            B37B39
                                                     .
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4187                                                 .        B39
                                                     .          .
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4197                                   CPB39.......................
                                           V
                                           V
4199                                   SRB39
                                               .
                                               .
4207                                               .        B35
                                                   .          .
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4217                                               .        B36
                                                   .          .
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4227                           DUMMY...................................
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4229                   DUMMY........................
                                       .
4231                       B40         .
                                       .
4243                                   .<-------  DD681S
4242                           DD681   .
                                   V   .
                                   V   .
4244                           D68B40  .
                                       .
4251                   CPB40............
                                       .
                                       .
4255                                   .------->  DB401S
4253                   DB401           .
                                       .
4260                                   .------->  DB402S
4258                   DB402           .
                           V           .
                           V           .
4263                   B40B41          .
                                       .
4270                                   .        B41
                                       .          .
                                       .          .
4281                                   .          .<-------  DD682S
4280                                   .      DD682
                                       .          V
                                       .          V
4282                                   .     D68B41
                                       .          .
                                       .          .
4290                                   .          .          .<-------  DD691S
4289                                   .          .      DD691
                                       .          .          V
                                       .          .          V
4291                                   .          .     D69B41
                                       .          .          .
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4298                   CPB41...................................
                                       .
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4302                                   .------->   DB41S
4300                   DB41SE          .
                           V           .
                           V           .
4305                   B41B43          .
                                       .
4312                                   .        B43
                                       .          .
                                       .          .
4322                                   .          .<-------  DD692S
4321                                   .      DD692
                                       .          V
                                       .          V
4323                                   .     D69B43
                                       .          .
                                       .          .
4330                   CPB43........................
                           V           .
                           V           .
4332                   B43B45          .
                                       .
4339                                   .        B44
                                       .          .
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4350                                   .          .<-------  DB401S
4349                                   .      DB401
                                       .          V
                                       .          V
4351                                   .     B40B44
                                       .          .
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4359                           CPB44............
                                       .
                                       .
4363                                   .------->  DB441S
4361                           DB441   .
                                       .
4368                                   .------->  DB442S
4366                           DB442   .
                                   V   .
                                   V   .
4371                           B44B45  .
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4378                                   .         B45
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4388                                                  .<-------  DB402S
4387                                            DB402
                                                    V
                                                    V
4389                                          B40B45
                                                    .
                                                    .
4397                                                    .<-------   DB41S
4396                                                DB41SE
                                                        V
                                                        V
4398                                                B41B45
                                                        .
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4405          CPB45.............................................
                V
                V
4407        B45B47
                .
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4414            L01
                .
                .
4425            .------->    RL01
4423        DL01RE
                V
                V
4428        L01L03
                .
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4436            .         L03
                .           .
                .           .
4447            .           .------->    RL03
4445            .      DL03RE
                .           .
                .           .
4450            .           .         L20
                .           .           .
                .           .           .
4462            .           .           .------->    RL20
4460            .           .      DL20RE
                .           .           V
                .           .           V
4465            .           .      L20L03
                .           .           .
                .           .           .
4473            .       CPL03........................
                .
                .
4478            .------->   DL03S
4475        DL03SE
                V
                V
4481        L03L04
                .
                .
4488            .         L04
                .           .
                .           .
4499            .           .------->    RL04
4497            .      DL04RE
                .           .
                .           .
4502            .       CPL04............
                .
                .
4506            .------->   DL04S
4504        DL04SE
                V
                V
4509        L04L05
                .
                .
4516            .         L02
                .           .
                .           .
4527            .           .------->    RL02
4525            .      DL02RE
                .           V
                .           V
4530            .      L02L05
                .           .
                .           .
4537            .           .         L05
                .           .           .
                .           .           .
4550            .           .           .------->    RL05
4546            .           .      DL05RE
                .           .           .
                .           .           .
4553            .       CPL05........................
                .           V
                .           V
4555        L05L09
                .
                .
4562            .         L09
                .           .
                .           .
4575            .           .------->    RL09
4571            .      DL09RE
                .           .
                .           .
4578            .       CPL09............
                .           V
                .           V
4580        L0913B
                .
                .
4589            .------->  DL13BR
4587        DL13BN
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4593            .           .<-------  DL13BR
4592            .      DL13BN
                .           V
                .           V
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4594                                  SRL13B
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4603                            CPL13B...........
                                     V
                                     V
4605                            L13B13
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4613                                  L13
                                        .
                                        .
4623                                        L06
                                            .
                                            .
4651                                        .------->    RL06
4632                                    DL06RE
                                            .
                                            .
4656                                        .------->   DL06S
4654                                    DL06SE
                                            V
                                            V
4659                                    L06L07
                                            .
                                            .
4666                                            .        L07
                                                .         .
                                                .         .
4688                                            .         .------->    RL07
4675                                            .     DL07RE
                                                .         .
                                                .         .
4692                                            .         .          .<-------   DL03S
4691                                            .         .     DL03SE
                                                .         .          V
                                                .         .          V
4693                                            .         .     L0307A
                                                .         .          V
                                                .         .          V
4701                                            .         .     L0307B
                                                .         .          .
                                                .         .          .
4708                                        CPL07........................
                                            .
                                            .
4712                                        .------->   DL07S
4710                                    DL07SE
                                            V
                                            V
4715                                    L07L08
                                            .
                                            .
4722                                            .        L08
                                                .         .
                                                .         .
4738                                            .         .------->    RL08
4731                                            .     DL08RE
                                                .         .
                                                .         .
4742                                            .         .          .<-------   DL04S
4741                                            .         .     DL04SE
                                                .         .          V
                                                .         .          V
4743                                            .         .     L04L08
                                                .         .          .
                                                .         .          .
4750                                        CPL08........................
                                            V
                                            V
4752                                    L08L12
                                            .
                                            .
4759                                            .        L10
                                                .         .
                                                .         .
4775                                            .         .------->    RL10
4769                                            .     DL10RE
                                                .         V
                                                .         V
4778                                            .     L10L11
                                                .         .
                                                .         .
4786                                            .         .          .<-------   DL06S
4785                                            .         .     DL06SE
                                                .         .          V
                                                .         .          V
4787                                            .         .     L06L11
                                                .         .          .
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4794                                            .         .          .        L11
                                                .         .          .         .
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4809                                            .         .          .         .------->    RL11
4804                                            .         .          .     DL11RE
                                                .         .          .         .
                                                .         .          .         .
4813                                            .         .          .         .          .<-------   DL07S
4812                                            .         .          .         .     DL07SE
                                                .         .          .         .          V
                                                .         .          .         .          V
4814                                            .         .          .         .     L07L11
                                                .         .          .         .          .
                                                .         .          .         .          .
4822                                            .     CPL11.................................
                                                .         .
                                                .         .
4826                                            .         .------->   DL11S
4824                                            .     DL11SE
                                                .         V
                                                .         V
4829                                            .     L11L12
                                                .         .
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4836                                            .         .        L12
                                                .         .         .
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4848                                            .         .          .------->    RL12
4845                                            .         .     DL12RE
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4851                                  CPL12.......................
                                          .
4855                                      .-------> DL121S
4853                                  DL121
                                          .
4860                                      .-------> DL122S
4858                                  DL122
                                          V
                                          V
4863                                 L12L13
                                          .
                                          .
4870                        CPL13........................
                                V
                                V
4872                        L13DS5
                                V
                                V
4880                        DS5L19
                                .
                                .
4888                              L14
                                    V
                                    V
4897                            L14L15
                                    .
                                    .
4904                                      L15
                                          .
                                          .
4913                             CPL15............
                                    V
                                    V
4915                            L15L16
                                    .
                                    .
4923                                      L16
                                          .
                                          .
4932                             CPL16............
                                    V
                                    V
4934                            L16L17
                                    .
                                    .
4941                                      L17
                                          .
                                          .
4952                                      .-------> RL17
4950                                 DL17RE
                                          .
                                          .
4955                             CPL17............
                                    .
                                    .
4959                                .-------> DL17S
4957                            DL17SE
                                    V
                                    V
4962                            L17L18
                                    .
                                    .
4969                                      L18
                                          .
                                          .
4979                                      .          .<------- DL11S
4978                                      .     DL11SE
                                          .          V
                                          .          V
4980                                      .     L11L18
                                          .          .
                                          .          .
4988                                      .          .          .<------- DL121S
4987                                      .          .      DL121
                                          .          .          V
                                          .          .          V
4989                                      .          .     L12L18
                                          .          .          .
                                          .          .          .
4996                             CPL18...................................
                                    .
                                    .
5000                                .-------> DL181S
4998                             DL181
                                    .
                                    .
5005                                .-------> DL182S
5003                             DL182
                                    V
                                    V
5008                            L18L19
                                    .
                                    .
5015                                      L19
                                          .
                                          .
5025                                      .          .<------- DL122S
5024                                      .      DL122
                                          .          V
                                          .          V
5026                                      .     L12L19
                                          .          .
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5033                        CPL19...................................
                                V
                                V
5035                        L19DS7
                                V
                                V
5043                        DS7L27
                                .
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5050                              L23
                                    V
                                    V
5059                            L23L24
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5066                                  L24
                                       .
5075                            CPL24.............
                                     V
                                     V
5077                           L24L26
                                       .
                                       .
5084                                  L25
                                       V
                                       V
5094                           L25L26
                                       .
                                       .
5102                                          .<-------  DL181S
5101                                     DL181
                                             V
                                             V
5103                                    L18L26
                                             .
                                             .
5111                                                   .<-------   DL17S
5110                                                DL17SE
                                                        V
                                                        V
5112                                                L17L26
                                                        .
                                                        .
5119                                                                L26
                                                                     .
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5128                            CPL26.............................................
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                                       .
5132                                   .------->   DL26S
5130                           DL26SE
                                     V
                                     V
5135                           L26L27
                                       .
                                       .
5142                                  L27
                                       .
                                       .
5153                                          .<-------  DL182S
5152                                     DL182
                                             V
                                             V
5154                                    L18L27
                                             .
                                             .
5161                     CPL27.................................
                             V
                             V
5163                     L27L34
                                 .
                                 .
5172                             .------->  DL34BR
5170                     DL34BN
                                 .
                                 .
5176                             .<-------  DL34BR
5175                           DL34BN
                                     V
                                     V
5177                           SRL34B
                                       .
                                       .
5185                     CPL34............
                             V
                             V
5187                     L34B34
                                 .
                                 .
5195                                 L33
                                       .
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5206                                   .------->   DL33S
5204                           DL33SE
                                     V
                                     V
5209                           L33L34
                                       .
                                       .
5216                                  L34
                                       .
                                       .
5227                                          .<-------   DL26S
5226                                    DL26SE
                                             V
                                             V
5228                                    L26L34
                                             .
                                             .
5235                     CPL34B................................
                             V
                             V
5237                     34DS11
                             V
                             V
5244                     DS1139
                                 .
                                 .
5251                             L39A
                                 .
                                 .
5261                     CPL39A............
                                 .
                                 .
5265                             .------->  DL39BR
5263                     DL39BN
                                 .
                                 .
5268                             L28
                                 V
                                 V
5277                           L28L29
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5284                                  L29
5295                            CPL29............
5299                                  .------->   DL29S
5297                            DL29SE
                                     V
                                     V
5302                            L29L36
5309                                  L35
5319                                                .<-------   DL29S
5318                                        DL29SE
                                                 V
                                                 V
5320                                        L29L35
5327                                     CPL35............
                                            V
                                            V
5329                                     L35L37
5336                                           L37
5346                                                      L36
5358                                                      .------->    RL36
5356                                                 DL36RE
5361                            CPL36.................................
                                     V
                                     V
5363                            L36L38
5371                                  L30
5382                                  .------->    RL30
5380                                     DL30RE
                                            V
                                            V
5385                                     L30L31
5392                                           L31
5403                                                      .------->    RL31
5401                                        DL31RE
5406                                     CPL31............
                                            V
                                            V
5408                                     L31L32
5415                                           L32
5424                                     CPL32............
                                            V
                                            V
5426                                     L32L38
5433                                           L38
5443                                                      .<-------   DL33S
5442                                                 DL33SE
                                                        V
                                                        V
5444                                                 L33L38
5451                            CPL38.................................
                                     V
                                     V
5453                            L38L39
5461                                  L39
5472                                                .<------- `DL39BR
5471                                        DL39BN
5473                            CPL39B......................
                                     V
                                     V
5475                            SRL39B
5483                       CPL39............
                                V
                                V
5485                       39DS13
                                V
                                V
5492                       DS1344
5499                            L41
5510                            .------->   DL41S
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5508                    DL41SE
                           V
                           V
5513                    L41L42
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5520                       .          L42
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5529                    CPL42............
                           .
                           .
5533                       .-------> DL421S
5531                    DL421
                           .
                           .
5538                       .-------> DL422S
5536                    DL422
                           V
                           V
5541                    L42L43.
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                           .
5549                       .          L43
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                           .            .
5558                    CPL43............
                           .
                           .
5562                       .-------> DL431S
5560                    DL431
                           .
                           .
5567                       .-------> DL432S
5565                    DL432
                           V
                           V
5570                    L43L44
                           .
                           .
5577                       .          L44
                           .            .
                           .            .
5587                CPL44........................
                       V
                       V
5589                44DS14
                       V
                       V
5596                DS1449
                       .
                       .
5603                   .        L40
                       .         V
                       .         V
5613                   .     L40L45
                       .        .
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5620                   .        .          L45
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5630                   .    CPL45............
                       .        V
                       .        V
5632                   .     L45L46
                       .        .
                       .        .
5639                   .        .          L46
                       .        .            .
                       .        .            .
5649                   .        .            .<-------   DL41S
5648                   .        .        DL41SE
                       .        .            V
                       .        .            V
5650                   .        .        L41L46
                       .        .            .
                       .        .            .
5657                   .    CPL46........................
                       .        .
                       .        .
5661                   .        .-------> DL461S
5659                   .    DL461
                       .        .
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5666                   .        .-------> DL462S
5664                   .    DL462
                       .        V
                       .        V
5669                   .     L46L47
                       .        .
                       .        .
5676                   .        .          L47
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5686                   .        .            .<-------  DL421S
5685                   .        .        DL421
                       .        .            V
                       .        .            V
5687                   .        .        L42L47
                       .        .            .
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5694                   .    CPL47........................
                       .        .
                       .        .
5698                   .        .-------> DL471S
5696                   .    DL471
                       .        .
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5703                   .        .-------> DL472S
5701                   .    DL472
                       .        V
                       .        V
5706                   .     L47L48
                       .        .
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5713                   .        .          L48
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5723                   .        .            .<-------  DL422S
5722                   .        .        DL422
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                                                                  V
                                                                  V
5724                                                        L42L48
                                                                  .
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5732                                                              .<-------  DL431S
5731                                                          DL431
                                                                  V
                                                                  V
5733                                                          L43L48
                                                                  .
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5740                                        CPL48.................................
                                                  .
                                                  .
5744                                              .------->  DL481S
5742                                        DL481
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5749                                              .------->  DL482S
5747                                        DL482
                                                  V
                                                  V
5752                                       L48L49
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5759                                                  .        L49
                                                                  .
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5770                                                              .<-------  DL432S
5769                                                          DL432
                                                                  V
                                                                  V
5771                                                          L43L49
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5778                                 CPL49.................................
                                          V
                                          V
5780                                 49DS15
                                          V
                                          V
5787                                 DS1554
                                          .
                                          .
5794                                          .        L54
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5805                                                              .<-------  DL482S
5804                                                          DL482
                                                                  V
                                                                  V
5806                                                          L48L54
                                                                  .
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5813                                 CPL54......................
                                          V
                                          V
5815                                 L54W2E
                                          V
                                          V
5822                                 W2EB46
                                          .
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5829                                          .        B46
                                                  .
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5840                                                              .<-------  DB441S
5839                                                          DB441
                                                                  V
                                                                  V
5841                                                          B44B46
                                                                  .
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5848                                 CPB46......................
                                          V
                                          V
5850                                 B46B47
                                          .
                                          .
5857                                          .        B47
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5867                                                              .<-------  DB442S
5866                                                          DB442
                                                                  V
                                                                  V
5868                                                          B44B47
                                                                  .
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5875                            CPB47.................................
                                     .
                                     .
5877                                     B48
                                          .
                                          .
5886                            CPB48............
                                     V
                                     V
5888                            SRB48
                                     V
                                     V
5897                           B48B54
                                     .
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5904                                     B42
                                          V
                                          V
5913                                 B42B53
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5920                                          .        B53
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5929                                 CPB53............
                                          V
                                          V
5931                                 B53B54
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5938                                B49
                                     V
                                     V
5947                            B49B50
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5954                                 .          B50
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5964                                 .           .          .<-------  LR02LR
5963                                 .           .     LR02SD
                                     .           .          V
                                     .           .          V
5965                                 .           .     B02B50
                                     .           .           .
                                     .           .           .
5973                                 .      CPB50.......................
                                     .          V
                                     .          V
5975                                 .     B50B51
                                     .          .
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5982                                 .          .          B51
                                     .          .           .
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5991                                 .      CPB51............
                                     .          V
                                     .          V
5993                                 .     B51B52
                                     .          .
                                     .          .
6000                                 .          .          B52
                                     .          .           .
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6009                                 .      CPB52............
                                     .          V
                                     .          V
6011                                 .     B52B54
                                     .          .
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6018                                 .          .          B54
                                     .          .           .
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6030                                 .          .           .-------->    RB54
6028                                 .          .      DB54RE
                                     .          .           .
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6033                            CPB54.................................
                                    V
                                    V
6036                            B54B57
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6043                                .        B55
                                    .         V
                                    .         V
6052                                .     B55B56
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6059                                .         .        B56
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6070                                .         .         .-------->    RB56
6068                                .         .     DB56RE
                                    .         .         .
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6073                                .      CPB56............
                                    .         V
                                    .         V
6075                                .     B56B57
                                    .         .
                                    .         .
6082                                .         .        B57
                                    .         .         .
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6093                                .         .         .-------->    RB57
6091                                .         .     DB57RE
                                    .         .         .
                                    .         .         .
6096                            CPB57........................
                                    V
                                    V
6098                            B57B58
                                    .
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6105                                .        B58
                                    .         .
                                    .         .
6117                                .         .-------->    RB58
6114                                .     DB58RE
                                    .         .
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6120                            CPB58............
                                    V
                                    V
6122                            B58B59
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6129                                .        B59
                                    .         .
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6142                                .         .-------->    RB59
6138                                .     DB59RE
                                    .         .
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6145                            CPB59............
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                                    .
6147                                .        B64
                                    .         .
                                    .         .
6159                                .         .-------->    RB64
6156                                .     DB64RE
                                    .         V
                                    .         V
6162                                .     B64B65
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6170                                .         .        B65
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6183          .           .           .           .-------->    DB65
6179          .           .           .        DB65
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6186          .      CPB65A.......................
              .           .
              .           .
6192          .           .-------->   DB65E
6188          .      DB65BN
              .           V
              .           V
6195          .      B6565B
              .           .
              .           .
6202          .           .         B61
              .           .           .
              .           .           .
6214          .           .           .-------->    RB61
6212          .           .      DB61RE
              .           .           V
              .           .           V
6217          .           .      B61B62
              .           .           .
              .           .           .
6225          .           .           .         B62
              .           .           .           .
              .           .           .           .
6237          .           .           .           .-------->    RB62
6235          .           .           .      DB62RE
              .           .           .           .
              .           .           .           .
6240          .           .       CPB62............
              .           .           V
              .           .           V
6242          .           .      B62B63
              .           .           .
              .           .           .
6251          .           .           .         B63
              .           .           .           .
              .           .           .           .
6260          .           .       CPB63............
              .           .           V
              .           .           V
6262          .           .       SRB63
              .           .           V
              .           .           V
6270          .           .      B63B65
              .           .           .
              .           .           .
6278          .           .           .           .<--------    DB65
6277          .           .           .        DB65
              .           .           .           .
              .           .           .           .
6279          .      CPB65B.......................
              .           V
              .           V
6281          .      B65B66
              .           .
              .           .
6288          .           .         S01
              .           .           .
              .           .           .
6308          .           .           .-------->    RS01
6300          .           .      DS01RE
              .           .           .
              .           .           .
6313          .           .           .-------->  DS011S
6311          .           .       DS011
              .           .           .
              .           .           .
6318          .           .           .-------->  DS012S
6316          .           .       DS012
              .           .           V
              .           .           V
6321          .           .      S01B66
              .           .           .
              .           .           .
6328          .           .           .         B66
              .           .           .           .
              .           .           .           .
6343          .           .           .           .-------->    RB66
6339          .           .           .      DB66RE
              .           .           .           .
              .           .           .           .
6346          .       CPB66.......................
              .           V
              .           V
6348          .      B66B68
              .           .
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6357          .           .           .<--------  DS011S
6356          .           .       DS011
              .           .           V
              .           .           V
6358          .           .      S01S02
              .           .           .
              .           .           .
6366          .           .           .         S02
              .           .           .           .
              .           .           .           .
6379          .           .           .           .-------->    RS02
6377          .           .           .      DS02RE
              .           .           .           .
              .           .           .           .
6382          .           .       CPS02............
              .           .           .
              .           .           .
6386          .           .           .-------->  DS021S
6384          .           .       DS021
              .           .           .
              .           .           .
6391          .           .           .-------->  DS022S
6389          .           .       DS022
              .           .           V
              .           .           V
6394          .           .      S02B67
              .           .           .
              .           .           .
6402          .           .           .         B67
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6414
6412                    DB67RE  .-------> RB67
6418
6417                                    .<------- DS012S
                                     DS012
                                        V
                                        V
6419                                 S01B67
6428            CPB67.......................
                   V
                   V
6430            B67B68
6437                    B68
6449                    DB68RE  .-------> RB68
6447
6452         CPB68.......................
                V
                V
6454         B68B69
6461                B69
6471                                    .<------- DS022S
6470                 DS022
                        V
                        V
6472                S02B69
6481         CPB69.......................
                V
                V
6483         B69B70
6490                B85
6504                        .-------> RB85
6499            DB85RE
                   V
                   V
6507            B85B86
6514                    B86
6525                    DB86RE  .-------> RB86
6523
6528            CPB86............
                   V
                   V
6530            B86B89
6537                    B87
6548                    DB87RE  .-------> RB87
6546
                        V
                        V
6551                B87B88
6558                                    B88
6569                                    .-------> RB88
6567                                 DB88RE
6572                 CPB88............
                        V
                        V
6574                B88B89
6581                                    B89
6593                                    .-------> RB89
6591                                 DB89RE
6596            CPB89.......................
                   V
                   V
6598            SRB89
6608                        .-------> DB89SD
6606            DB89SW
                   V
                   V
6611            B89B92
6618                    B90
6629                    DB90RE  .-------> RB90
6627
                        V
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                                  V
6632                         B90B91
                                  .
                                  .
6641                             B91
                                  .
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6654                              .-------->    RB91
6651                         DB91RE
                                  .
                                  .
6657                        CPB91............
                                  V
                                  V
6659                         B91B92
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                                  .
6666                             B92
                                  .
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6676                    CPB92.........................
                            V
                            V
6678                    B92B70
                                  .
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6685                             B70
                                  .
                                  .
6694                CPB70........................
                        V
                        V
6696                B70B93
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                                  .
6703                        B93
                                  .
                                  .
6714                              .-------->    RB93
6712                    DB93RE
                                  .
                                  .
6717                CPB93............
                        V
                        V
6719                B93B94
                                  .
                                  .
6726                        B94
                                  .
                                  .
6736                CPB94............
                                  .
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6738        DUMMY............
                                  .
6740                B101
                        V
                        V
6750                SRB101
                        V
                        V
6758                B101S
                                  .
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6765                        S06
                                  .
                                  .
6784                              .-------->    RS06
6777                    DS06RE
                                  .
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6787                CPS06............
                        V
                        V
6789                S06S07
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6797                        S07
                                  .
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6809                              .-------->    RS07
6807                    DS07RE
                                  .
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6812                CPS07............
                        V
                        V
6814                S07S08
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6822                        S08
                                  .
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6837                              .-------->    RS08
6834                    DS08RE
                                  .
                                  .
6840                CPS08............
                        V
                        V
6842                S08S09
                                  .
                                  .
6849                        S09
                                  .
                                  .
6865                              .-------->    RS09
6859                    DS09RE
                                  .
                                  .
6868                CPS09............
                        V
                        V
6870                SRS09
                                  .
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6880                              :-------->  DS091W
6878                DS091
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6885            .          .-------> DS092W
6883            .     DS092
                .        V
                .        V
6888            .     S09S23
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                .          .
6897            .          .        S21
                .          .          .
                .          .          .
6908            .          .          .-------> DS21S
6906            .          .     DS21SE
                .          .        V
                .          .        V
6911            .          .     S21S23
                .          .          .
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6920            .          .          .        S22
                .          .          .          ..
                .          .          .          .
6932            .          .          .          .------->    RS22
6930            .          .          .     DS22RE
                .          .          .        V
                .          .          .        V
6935            .          .          .     S22S23
                .          .          .          .
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6944            .          .          .          .         S23
                .          .          .          .          .
                .          .          .          .          .
6957            .          .          .          .          .------->    RS23
6955            .          .          .          .     DS23RE
                .          .          .          .          .
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6960            .     CPS23.................................
                .        V
                .        V
6962            .     SRS23
                .        V
                .        V
6970            .     S23S24
                .          .
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6979            .          .        S24
                .          .          .
                .          .          .
6989            .          .          .        S03
                .          .          .          .
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7008            .          .          .          .------->    RS03
7002            .          .          .     DS03RE
                .          .          .          .
                .          .          .          .
7012            .          .          .          .          .<-------  DS021S
7011            .          .          .          .      DS021
                .          .          .          .          V
                .          .          .          .          V
7013            .          .          .          .     S02S03
                .          .          .          .          .
                .          .          .          .          .
7020            .          .          .      CPS03............
                .          .          .        V
                .          .          .        V
7022            .          .          .     S03S04
                .          .          .          .
                .          .          .          .
7030            .          .          .          .         S04
                .          .          .          .          .
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7045            .          .          .          .          .------->    RS04
7041            .          .          .          .     DS04RE
                .          .          .          .          .
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7048            .          .          .      CPS04............
                .          .          .        V
                .          .          .        V
7050            .          .          .      SRS04
                .          .          .        V
                .          .          .        V
7058            .          .          .     S04S10
                .          .          .          .
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7068            .          .          .          .          .<-------  DS091W
7067            .          .          .          .      DS091
                .          .          .          .          V
                .          .          .          .          V
7069            .          .          .          .     S09S10
                .          .          .          .          .
                .          .          .          .          .
7078            .          .          .          .          .         S05
                .          .          .          .          .          V
                .          .          .          .          .          V
7088            .          .          .          .          .     S05S10
                .          .          .          .          .          .
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7097            .          .          .          .          .          .         S10
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7107            .          .          .      CPS10.................................
                .          .          .        V
                .          .          .        V
7109            .          .          .     S10S24
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                .          .          .          .
7119            .          .          .          .          .<-------  DS092W
7118            .          .          .          .      DS092
                .          .          .          .          V
                .          .          .          .          V
7120            .          .          .          .     S09S24
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7129            .     CPS24.................................
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7131            .     S24S25
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7140            .          .        W21
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                 .         .         V
                 .         .         V
7150             .         .     W21L50
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7157             .         .         .         L50
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7167             .         .      CPL50............
                 .         .         V
                 .         .         V
7169             .         .     L50L51
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                 .         .         .
7176             .         .         .         L51
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                 .         .         .           .
7187             .         .         .           .-------->    RL51
7185             .         .         .     DL51RE
                 .         .         .           .
                 .         .         .           .
7191             .         .         .           .           .<-------  DL461S
7190             .         .         .           .       DL461
                 .         .         .           .           V
                 .         .         .           .           V
7192             .         .         .           .      L46L51
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                 .         .         .           .           .
7199             .         .      CPL51........................
                 .         .         V
                 .         .         V
7201             .         .     L51L52
                 .         .         .
                 .         .         .
7208             .         .         .         L52
                 .         .         .           .
                 .         .         .           .
7219             .         .         .           .-------->    RL52
7217             .         .         .     DL52RE
                 .         .         .           .
                 .         .         .           .
7223             .         .         .           .           .<-------  DL462S
7222             .         .         .           .       DL462
                 .         .         .           .           V
                 .         .         .           .           V
7224             .         .         .           .      L46L52
                 .         .         .           .           .
                 .         .         .           .           .
7232             .         .         .           .           .           .<-------  DL471S
7231             .         .         .           .           .       DL471
                 .         .         .           .           .           V
                 .         .         .           .           .           V
7233             .         .         .           .           .      L47L52
                 .         .         .           .           .           .
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7240             .         .      CPL52....................................
                 .         .         .
                 .         .         .
7244             .         .         .-------> DL521S
7242             .         .      DL521
                 .         .         .
                 .         .         .
7249             .         .         .-------> DL522S
7247             .         .      DL522
                 .         .         V
                 .         .         V
7252             .         .     L52L53
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                 .         .         .
7259             .         .         .         L53
                 .         .         .           .
                 .         .         .           .
7269             .         .         .           .           .<-------  DL472S
7268             .         .         .           .       DL472
                 .         .         .           .           V
                 .         .         .           .           V
7270             .         .         .           .      L47L53
                 .         .         .           .           .
                 .         .         .           .           .
7278             .         .         .           .           .           .<-------  DL481S
7277             .         .         .           .           .       DL481
                 .         .         .           .           .           V
                 .         .         .           .           .           V
7279             .         .         .           .           .      L48L53
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7286             .         .      CPL53....................................
                 .         .         .
                 .         .         .
7290             .         .         .-------> DL531S
7288             .         .      DL531
                 .         .         .
                 .         .         .
7295             .         .         .-------> DL532S
7293             .         .      DL532
                 .         .         V
                 .         .         V
7298             .         .     L53L54
                 .         .         V
                 .         .         V
7305             .         .      SRL54
                 .         .         V
                 .         .         V
7314             .         .     L54L58
                 .         .         .
                 .         .         .
7321             .         .         .         L55
                 .         .         .           .
                 .         .         .           .
7332             .         .         .           .-------> DL551S
7330             .         .         .     DL551
                 .         .         .           .
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7337             .         .         .           .-------> DL552S
7335             .         .         .     DL552
                 .         .         .           V
                 .         .         .           V
7340             .         .         .     L55L56
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7348                                    L56
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7359                                     .-------> RL56
7357                                DL56RE
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7363                                     .<------- DL521S
7362                                     .      DL521
                                         .          V
                                         .          V
7364                                     .     L52L56
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7371                            CPL56.......................
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7375                                .-------> DL561S
7373                            DL561
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7380                                .-------> DL562S
7378                            DL562
                                    V
                                    V
7383                           L56L57
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7390                                    L57
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7400                                     .<------- DL522S
7399                                     .      DL522
                                         .          V
                                         .          V
7401                                     .     L52L57
                                         .          .
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7409                                     .          .          .<------- DL531S
7408                                     .          .      DL531
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                                         .          .          V
7410                                     .          .     L53L57
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7417                            CPL57...................................
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7421                                .-------> DL571S
7419                            DL571
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7426                                .-------> DL572S
7424                            DL572
                                    V
                                    V
7429                           L57L58
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7436                                    L58
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7446                                     .<------- DL532S
7445                                     .      DL532
                                         .          V
                                         .          V
7447                                     .     L53L58
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7456                        CPL58...................................
                                V
                                V
7458                        L58L63
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7465                                L63
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7475                                    .<------- DL572S
7474                                    .     DL572
                                        .         V
                                        .         V
7476                                    .     L57L63
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7485                        CPL63......................
                                V
                                V
7487                        L63L64
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7494                                L64
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7503                        CPL64............
                                V
                                V
7505                        L64L67
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7512                                L67
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7521                        CPL67............
                                V
                                V
7523                        L67L68
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7530                                L60
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                                    .
7540                                    .<------- DL552S
7539                                    .     DL552
                                        .         V
                                        .         V
7541                                    .     L55L60
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7551                                    .         .          .<------- DL561S
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7550                                                  DL561
                                                        V
                                                        V
7552                                                L56L60
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7561                                  CPL60.......................
                                                        .
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7565                                          .-------> DL601S
7563                                  DL601
                                                        .
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7570                                          .-------> DL602S
7568                                  DL602
                                        V
                                        V
7573                                 L60L61
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7582                                            L61
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7592                                                          .<-------  DL562S
7591                                                    DL562
                                                        V
                                                        V
7593                                                L56L61
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7602                                  CPL61.......................
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7606                                          .-------> DL61S
7604                                 DL61SE
                                        V
                                        V
7609                                 L61L62
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7618                                            L62
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7628                                                          .<-------  DL571S
7627                                                    DL571
                                                        V
                                                        V
7629                                                L57L62
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7637                                  CPL62.......................
                                        V
                                        V
7639                                 L62L68
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7648                                                  .<-------  DL602S
7647                                            DL602
                                                        V
                                                        V
7649                                            L60L68
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7659                                                          .<-------  DL61S
7658                                                    DL61SE
                                                        V
                                                        V
7660                                                L61L68
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7667                                                          .         L68
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7677                          CPL68.............................................
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7679                                     W28
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7692                                          .-------> RW28
7688                                 DW28RE
                                        V
                                        V
7695                                 W28W29
                                                        .
                                                        .
7703                                            W29
                                                        .
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7716                                                  .-------> RW29
7712                                            DW29RE
                                                        .
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7719                                  CPW29............
                                        V
                                        V
7721                                 W29W30
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7728                                            W30
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7737                                  CPW30............
                                        V
                                        V
7739                                 W30L59
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7746                                            L59
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7757                                                  .-------> RL59
7755                                            DL59RE
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7761                                                          .<-------  DL551S
7760                                                    DL551
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7762                                                L55L59
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7770                CPL59.......................
                        V
                        V
7772                L59L65
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7779                        W31
                              V
                              V
7788                      W31W32
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7796                              W32
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7805                       CPW32............
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                              V
7807                      W32L65
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7815                              L65
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7824                CPL65.......................
                        V
                        V
7826                L65L69
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7833                        L69
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7843                CPL69............
                        V
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7845                L69L70
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7852                        L70
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7861                CPL70............
                        V
                        V
7863                L70L71
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7870                        L66
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7880                                      .<-------  DL601S
7879                                 DL601
                                        V
                                        V
7881                                L60L66
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7890                       CPL66............
                              V
                              V
7892                      L66L71
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7899                              L71
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7910                                      .------->    RL71
7908                                 DL71RE
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                                        .
7913                CPL71.......................
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7915                        L72
                              .
                              .
7927                                .------->    RL72
7925                      DL72RE
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7930          CPL72.......................
                  V
                  V
7932          SRL72
                  V
                  V
7941          L72RID
                  V
                  V
7949          RIDS13
                  .
                  .
7956                S12
                      V
                      V
7965              SRS12
                      V
                      V
7973              S12S13
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7980                        S13
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                              .
7992                                .------->    RS13
7990                      DS13RE
                              .
                              .
7995          CPS13.......................
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7999              .------->   DS13S
7997          DS13SE
                  V
                  V
8002          S13S19
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8010                S19
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8026                 .------->   RS19
8021            DS19RE
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8029        CPS19............
                 V
                 V
8031        S19S20
                     .
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8039                B95
                     V
                     V
8048            B95B96
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8057                 ..       B96
                     .         .
                     .         .
8069                 .         .------->   RB96
8067                 .     DB96RE
                     .         .
                     .         .
8072            CPB96............
                     V
                     V
8074            B96B97
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8081                 .        B97
                     .         .
                     .         .
8091            CPB97............
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                     .
8095                 .------->   RB97
8093            DB97RE
                     V
                     V
8098            SRB97
                     .
                     .
8108                 .------->   DD97S
8106            DB97SE
                     V
                     V
8111            B97B99
                     .
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8118                 .        B99
                     .         .
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8127            CPB99............
                     V
                     V
8129            B99S11
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8137                 .        S11
                     .         .
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8146            CPS11............
                     V
                     V
8148            SRS11
                     V
                     V
8156            S11S14
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8163                 .        S14
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                     .         .
8179                 .         .------->   RS14
8175                 .     DS14RE
                     .         .
                     .         .
8182            CPS14A...........
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                     .
8185                 .         .<-------   DS13S
8184                 .     DS13SE
                     .         V
                     .         V
8186                 .     S13S14
                     .         .
                     .         .
8193            CPS14B...........
                     V
                     V
8195            S14S16
                     .
                     .
8202                 .        B98
                     .         .
                     .         .
8214                 .         .------->   RB98
8212                 .     DB98RE
                     .         V
                     .         V
8217                 .     B98100
                     .         .
                     .         .
8224                 .         .       B100
                     .         .         .
                     .         .         .
8234                 .         .         .         .<-------   DD97S
8233                 .         .         .     DB97SE
                     .         .         .         .
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8235                 .     CPB100......................
                     .         V
                     .         V
8237                 .      B100S
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8244                                                S15
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8260                                                 .-------> RS15
8256                                          DS15RE
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8263                                       CPS15............
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8265                                       S15S16
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8272                                                 S16
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8286                                                 .-------> RS16
8282                                          DS16RE
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8289                                   CPS16........................
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                                           V
8291                                   S16S18
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8298                                           S17
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                                                 V
8308                                       S17S18
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8315                                                 S18
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8336                                                 .-------> RS18
8329                                          DS18RE
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8339                                   CPS18........................
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8341                                           S20
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8354                                                 .-------> RS20
8351                                       DS20RE
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8357                                 CPS20........................
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                                         V
8359                                 S20S26
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8367                                     S26
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8376                                 CPS26............
                                         V
                                         V
8378                                 S26S31
                                         .
8387                                     S26A
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8399                                     .-------> RS26
8397                                 DS26RE
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8403                                         .<-------  DS21S
8402                                       DS21SE
                                                 V
                                                 V
8404                                       S2126A
                                                     .
8411                                 CPS26A............
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8415                                     .-------> DS26S
8413                                 DS26SE
                                         V
                                         V
8418                                 26A31A
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8426                                           S28
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8439                                                 .-------> RS28
8437                                       DS28RE
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                                                 V
8442                                       S28S29
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8449                                                 S29
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8458                                       CPS29............
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8460                                       S29S30
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8468                                                 S30
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8477                                       CPS30............
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8479                                       S30S32
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8488                                                 S32
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8498                                       CPS32............
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8500            .         .         .         .         .       S31A
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8510            .         .         .         .         .         .         S31
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                .         .         .         .         .         .           .
8519            .         .      CPS31.......................................
                .         .         V
                .         .         V
8521            .         .      SRS31
                .         .         V
                .         .         V
8531            .         .     S31S27
                .         .         .
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8539            .         .         .        S27
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8550            .         .         ..         .<-------   DS26S
8549            .         .         .     DS26SE
                .         .         .          V
                .         .         .          V
8551            .         .         .     S26A27
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8559            .         .      CPS27......................
                .         .         V
                .         .         V
8561            .         .     S27S82
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8568            .         .         .        S82
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8578            .         .      CPS82...........
                .         .         V
                .         .         V
8580            .         .     S8281A
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                .         .         .
8587            .         .         .       S81A
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8597            .         .     CPS81A...........
                .         .         V
                .         .         V
8599            .         .     S81A25
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8606            .         .         .        S25
                .         .         .          .
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8615            .      CPS25......................
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                .         .
8617            .         .        S81
                .         .         .
                .         .         .
8626            .         .         .       S82A
                .         .         .         V
                .         .         .         V
8636            .         .         .     S82A83
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8644            .         .         .          .        S83
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8654            .         .         .     CPS83...........
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8656            .         .         .          .        S84
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8665         DUMMY.......................................
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8667            .        S35
                .         V
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8676            .      S35S44
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8682            .         .        S34
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8693            .         .         .-------->   DS34S
8691            .         .     DS34SE
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                .         .         V
8696            .         .     S34S44
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8705            .         .         .        S44
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8714            .      CPS44......................
                .         V
                .         V
8716            .      SRS44
                .         V
                .         V
8724            .      S44S45
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8733            .         .         .<-------   DS34S
8732            .         .     DS34SE
                .         .         V
                .         .         V
8734            .         .     S34S45
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8742            .         .         .        S45
                .         .         .          .
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8753            .         .         .          .-------->    RS45
8751            .         .         .     DS45RE
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8756          .      CPS45......................
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              .          V
8758          .     S45S46
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8766          .          .         S46
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8778          .          .           .-------->    RS46
8775          .          .     DS46RE
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8781          .      CPS46............
              .          V
              .          V
8783          .      SRS46
              .          V
              .          V
8791          .     S46S47
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8800          .          .         S47
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8809          .      CPS47............
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              .          V
8811          .     S47S48
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8819          .          .         S48
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8828          .      CPS48............
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8832          .          .-------->   DS48S
8830          .      DS48S
              .          V
              .          V
8835          .     S48S50
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8844          .          .         S49
              .          .           V
              .          .           V
8853          .          .     S49S50
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8862          .          .           .         S50
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8871          .      CPS50......................
              .          V
              .          V
8873          .      SRS50
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              .          V
8881          .     S50S51
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8889          .          .         S36
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8901          .          .           .-------->    RS36
8899          .          .     DS36RE
              .          .           V
              .          .           V
8904          .          .      SRS36
              .          .           V
              .          .           V
8912          .          .     S36S37
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8921          .          .           .         S37
              .          .           .           .
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8930          .          .      CPS37............
              .          .           V
              .          .           V
8932          .          .     S37S38
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8941          .          .           .         S38
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8950          .          .      CPS38............
              .          .           V
              .          .           V
8952          .          .     S38S39
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8961          .          .           .         S39
              .          .           .           .
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8970          .          .      CPS39............
              .          .           V
              .          .           V
8972          .          .     S39S43
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8981          .          .           .         S40
              .          .           .           V
              .          .           .           V
8990          .          .           .     S40S41
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8999          .          .           .           .         S41
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9009          .          .           .      CPS41............
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              .          .           .           V
9011          .          .           .     S41S42
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9020          .          .           .           .         S42
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9029                                CPS42............
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9031                                S42S43
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9040                                  .          S43
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9049                          CPS43.......................
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9051                          SRS43
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9059                          S43S51
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9068                                  .         S33
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                                      .          V.
9078                                S33S51
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9087                                  .          S51
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9096                      CPS51...................................
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                              V
9098                      SRS51
                              V
                              V
9106                      S51S54
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9115                              S52
                                  V
                                  V
9125                          S52S54
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9133                              .         S54
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9142                      CPS54......................
                              V
                              V
9144                      S54S55
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9153                              S53
                                  V
                                  V
9162                          S53S55
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9171                              .         S55
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9180                      CPS55......................
                              V
                              V
9182                      S55S74
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9191                              S56
                                  V
                                  V
9200                          S56S57
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9209                              .         S57
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9218                          CPS57............
                                  V
                                  V
9220                          S57S58
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9230                              .<-------   DS48S
9229                              .       DS48S
                                  .          V
                                  .          V
9231                              .      S48S58
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9240                              .          .         S58
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9249                          CPS58.......................
                                  V
                                  V
9251                          SRS58
                                  V
                                  V
9259                          S58S59
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9268                              .         S59
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9278                          CPS59............
                                  V
                                  V
9280                          SRS59
                                  V
                                  V
9288                          S59S74
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9297                              .         S72
                                  .          V
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9306                              .      S72S73
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9315                              .          .         S73
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9324                                  CPS73............
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9326                                  S73S74
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9335                                      .         S74
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9344                CPS74.................................
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9348                    .-------> DS741W
9346                DS741
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9353                    .-------> DS742W
9351                DS742
                        V
                        V
9356               S74S79
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9365                    .        S79
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9374                CPS79............
                        V
                        V
9376               S79S80
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9385                    .        S92
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9395                    .          .          .<-------  DS741W
9394                    .          .      DS741
                        .          .          V
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9396                    .          .      S74S92
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9405                    .      CPS92............
                        .          V
                        .          V
9407                    .     S92S80
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9417                    .          .          .<-------  DS742W
9416                    .          .      DS742
                        .          .          V
                        .          .          V
9418                    .          .      S74S80
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9427                    .          .          .         S80
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9437                CPS80.................................
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9439                    .        S90
                        .          V
                        .          V
9448                    .     S90S91
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9455                    .          .        S91
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9465                    .      CPS91............
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9467                    .          .        S89
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9477                    .          .          .         S88
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9486                    .          .          .           .        S87
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9495                    .          .          .           .          .        S86
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9504                    .          .          .           .          .          .        S85
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9513                    .          .          .       DUMMY.................................
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9515            DUMMY.............................................
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9517                   W59
                        V
                        V
9527               W59W60
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9535                    .        W61
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9545                    .          .------->   DW61S
9543                    .     DW61SE
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9548                    .          .        W60
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9558                CPW60......................
                        V
                        V
9560                SRW60
                        V
                        V
9568               W60S61
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9576                S61
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9585          CPS61.....
                 V
                 V
9587          S61S62
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9595                S62
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9604          CPS62.....
                 V
                 V
9606          S62S64
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9614                S63
                     V
                     V
9623             S63S64
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9631                     .        S64
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9640          CPS64.......................
                 V
                 V
9642          S64S67
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9650                S67
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9659          CPS67.....
                 V
                 V
9661          S6768A
                 V
                 V
9669          S6768B
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9677                S68
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9686          CPS68.....
                 V
                 V
9688          S6869A
                 V
                 V
9696          S6869B
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9704                S69
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9713          CPS69.....
                 V
                 V
9715          S69S70
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9723                S70
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9733          CPS70.....
                 V
                 V
9735          S70S71
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9743                S71
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9753          CPS71.....
                 V
                 V
9755          S71S78
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9763                S78
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9773          CPS78.....
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9776                     .<-------   DW61S
9775             DW61SE
                     V
                     V
9777             W61S65
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9785                     .        S65
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9794              CPS65.....
                     V
                     V
9796             S65S66
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9804                     .        S66
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9815                     .          .------->    RS66
9813                     .     DS66RE
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9818              CPS66.....
                     V
                     V
9820              SRS66
                     V
                     V
9828             S66S75
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 9837           .          .          .          S75
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 9846           .          .     CPS75............
                .          .          V
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 9848           .          .     S75S76
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 9857           .          .          .          S76
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 9866           .          .     CPS76............
                .          .          V
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 9868           .          .     S76S77
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 9876           .          .          .          S77.
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 9885           .          .     CPS77............
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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	N07	602.	12.25	54.	14.	5.	.57		
+	DIVERSION TO	DN07AS	116.	12.08	16.	4.	1.	.57		
+	HYDROGRAPH AT	DN07A	486.	12.25	38.	10.	3.	.57		
+	DIVERSION TO	DN07BS	128.	12.17	13.	3.	1.	.57		
+	HYDROGRAPH AT	DN07B	358.	12.25	26.	6.	2.	.57		
+	DIVERSION TO	DN07CS	80.	12.25	4.	1.	0.	.57		
+	HYDROGRAPH AT	DN07C	278.	12.25	22.	5.	2.	.57		
+	DIVERSION TO	DN07DS	244.	12.25	20.	5.	2.	.57		
+	HYDROGRAPH AT	DN07D	34.	12.25	1.	0.	0.	.57		
+	ROUTED TO	N07N06	11.	13.00	1.	0.	0.	.57		
+	HYDROGRAPH AT	N01	479.	12.17	31.	8.	3.	.34		
+	HYDROGRAPH AT	N02A	74.	12.33	8.	2.	1.	.08		
+	ROUTED TO	N2AN01	57.	12.75	8.	2.	1.	.08		
+	2 COMBINED AT	CPN01	479.	12.17	39.	10.	3.	.43		
+	ROUTED TO	N01N02	421.	12.25	39.	10.	3.	.43		
+	HYDROGRAPH AT	N02	743.	12.25	67.	20.	7.	.51		
+	DIVERSION TO	RN02	743.	12.25	67.	19.	6.	.51		
+	HYDROGRAPH AT	DN02RE	3.	23.25	1.	0.	0.	.51		
+	HYDROGRAPH AT	N03A	74.	12.25	6.	2.	1.	.06		
+	ROUTED TO	N3AN02	42.	13.08	6.	2.	1.	.06		
+	3 COMBINED AT	CPN02	421.	12.25	45.	12.	4.	1.00		
+	ROUTED TO	N02N3B	305.	12.50	45.	12.	4.	1.00		
+	HYDROGRAPH AT	N03B	451.	12.17	41.	13.	4.	.28		
+	DIVERSION TO	RN03B	227.	12.00	14.	4.	1.	.28		
+	HYDROGRAPH AT	DN3BRE	451.	12.17	32.	9.	3.	.28		
+	2 COMBINED AT	CPN03B	482.	12.25	77.	20.	7.	1.29		
+	ROUTED TO	N3BN04	373.	12.83	75.	20.	7.	1.29		
+	HYDROGRAPH AT	N04	1067.	12.42	141.	42.	14.	.99		
	HYDROGRAPH AT									

+	N03	518.	12.25	49.	15.	5.	.36
+ DIVERSION TO	RN03	274.	12.08	17.	5.	2.	.36
+ HYDROGRAPH AT	DN03RE	518.	12.25	36.	10.	3.	.36
+ ROUTED TO	N03N04	238.	12.83	35.	10.	3.	.36
+ HYDROGRAPH AT	N04A	257.	12.17	19.	5.	2.	.20
+ ROUTED TO	N4AN04	128.	13.00	19.	5.	2.	.20
+ HYDROGRAPH AT	N04B	229.	12.08	12.	3.	1.	.13
+ ROUTED TO	N4BN04	88.	12.75	12.	3.	1.	.13
+ 5 COMBINED AT	CPN04	1123.	12.83	276.	79.	27.	2.97
+ DIVERSION TO	RN04	1123.	12.83	185.	48.	16.	2.97
+ HYDROGRAPH AT	DN04RE	649.	13.17	110.	31.	10.	2.97
+ ROUTED TO	N04N05	446.	13.67	106.	31.	10.	2.97
+ HYDROGRAPH AT	N05	1065.	12.50	157.	46.	16.	1.00
+ DIVERSION TO	RN05	226.	12.00	25.	8.	3.	1.00
+ HYDROGRAPH AT	DN05RE	1065.	12.50	145.	39.	13.	1.00
+ HYDROGRAPH AT	DN07A	116.	12.08	16.	4.	1.	.57
+ ROUTED TO	N7AN05	109.	12.92	16.	4.	1.	.57
+ HYDROGRAPH AT	DN07B	128.	12.17	13.	3.	1.	.57
+ ROUTED TO	N7BN05	90.	13.08	13.	3.	1.	.57
+ HYDROGRAPH AT	DN07C	80.	12.25	4.	1.	0.	.57
+ ROUTED TO	N7CN05	42.	12.75	4.	1.	0.	.57
+ 5 COMBINED AT	CPN05	1084.	12.58	277.	78.	26.	4.53
+ ROUTED TO	N05N06	970.	12.67	275.	78.	26.	4.53
+ HYDROGRAPH AT	N06	227.	12.25	19.	5.	2.	.22
+ 3 COMBINED AT	CPN06	1016.	12.67	294.	83.	28.	4.75
+ HYDROGRAPH AT	N08	1557.	12.67	259.	77.	26.	1.72
+ HYDROGRAPH AT	N10	692.	12.33	83.	25.	8.	.64
+ ROUTED TO	N10N11	556.	12.75	82.	25.	8.	.64
+ HYDROGRAPH AT	N11	844.	12.33	96.	29.	10.	.70
+ 2 COMBINED AT	CPN11	962.	12.42	177.	53.	18.	1.34
+ ROUTED TO	N11N09	898.	12.67	177.	53.	18.	1.34
+ HYDROGRAPH AT	N09	880.	12.50	128.	39.	13.	.88
+ HYDROGRAPH AT	N14	708.	12.25	66.	19.	6.	.51
+ DIVERSION TO	RN14	708.	12.25	66.	19.	6.	.51
+ HYDROGRAPH AT	DN14RE	0.	.00	0.	0.	0.	.51
+ 3 COMBINED AT	CPN09	1689.	12.58	303.	91.	31.	2.72
+ ROUTED TO	N09N18	1674.	12.58	303.	91.	31.	2.72
+ HYDROGRAPH AT	N18	682.	12.25	71.	22.	7.	.44
+ 2 COMBINED AT	CPN18	1797.	12.58	373.	113.	38.	3.16
+ ROUTED TO	N18N15	1732.	12.67	373.	113.	38.	3.16
HYDROGRAPH AT							

+	N12	835.	12.58	138.	40.	13.	.78
+ ROUTED TO	N12N13	833.	12.58	138.	40.	13.	.78
+ HYDROGRAPH AT	N13	701.	12.58	123.	38.	13.	.72
+ 2 COMBINED AT	CPN13	1531.	12.58	260.	78.	26.	1.51
+ ROUTED TO	N13N15	1459.	12.75	260.	78.	26.	1.51
+ HYDROGRAPH AT	N16	434.	12.25	43.	13.	4.	.28
+ ROUTED TO	N16N15	430.	12.25	43.	13.	4.	.28
+ HYDROGRAPH AT	N15	1027.	12.33	137.	43.	14.	.85
+ 4 COMBINED AT	CPN15	3749.	12.58	804.	244.	82.	5.81
+ ROUTED TO	N15N17	3744.	12.58	804.	244.	82.	5.81
+ HYDROGRAPH AT	N17	1298.	12.50	190.	57.	19.	1.29
+ 2 COMBINED AT	CPN17	4912.	12.58	982.	298.	100.	7.10
+ HYDROGRAPH AT	N20	165.	12.17	15.	5.	2.	.09
+ ROUTED TO	N20N21	98.	12.42	14.	5.	2.	.09
+ HYDROGRAPH AT	N21	323.	12.25	33.	10.	3.	.19
+ 2 COMBINED AT	CPN21	381.	12.25	47.	15.	5.	.28
+ DIVERSION TO	DN21S	141.	12.25	18.	5.	2.	.28
+ HYDROGRAPH AT	DN21SE	239.	12.25	30.	9.	3.	.28
+ ROUTED TO	N21N25	171.	12.58	30.	9.	3.	.28
+ HYDROGRAPH AT	N22	203.	12.17	17.	5.	2.	.11
+ HYDROGRAPH AT	DN21SE	141.	12.25	18.	5.	2.	.28
+ ROUTED TO	N21N22	134.	12.33	18.	5.	2.	.28
+ 2 COMBINED AT	CPN22	311.	12.17	34.	10.	4.	.39
+ ROUTED TO	N22N25	236.	12.50	34.	10.	4.	.39
+ HYDROGRAPH AT	N25	573.	12.33	60.	18.	6.	.49
+ 3 COMBINED AT	CPN25	832.	12.33	124.	38.	13.	.88
+ ROUTED TO	N25N26	770.	12.50	123.	38.	13.	.88
+ HYDROGRAPH AT	N26	173.	12.42	17.	4.	1.	.26
+ 2 COMBINED AT	CPN26	932.	12.50	140.	42.	14.	1.14
+ HYDROGRAPH AT	N19	372.	12.08	35.	11.	4.	.18
+ HYDROGRAPH AT	N23	811.	12.25	82.	25.	8.	.52
+ ROUTED TO	N23N24	605.	12.33	82.	25.	8.	.52
+ HYDROGRAPH AT	N24	357.	12.25	30.	9.	3.	.25
+ 2 COMBINED AT	CPN24	887.	12.25	112.	34.	11.	.77
+ HYDROGRAPH AT	N27	112.	12.25	7.	2.	1.	.13
+ 4 COMBINED AT	DUMMY	1777.	12.33	293.	88.	30.	2.21
+ 4 COMBINED AT	DUMMY	8345.	12.50	1709.	515.	173.	15.78
+ HYDROGRAPH AT	D03	960.	12.25	110.	34.	11.	.72
+ DIVERSION TO	RD03	960.	12.25	96.	26.	9.	.72
+ HYDROGRAPH AT	DD03RE	177.	12.67	25.	8.	3.	.72
ROUTED TO							

+	D03D04	110.	12.92	24.	8.	3.	.72
+ HYDROGRAPH AT	D04	1149.	12.33	142.	44.	15.	.89
+ DIVERSION TO	RD04	1118.	12.33	85.	24.	8.	.89
+ HYDROGRAPH AT	DD04RE	1065.	12.42	72.	20.	7.	.89
+ 2 COMBINED AT	CPD04	1062.	12.42	95.	28.	9.	1.61
+ DIVERSION TO	DD04S	647.	12.42	30.	7.	2.	1.61
+ HYDROGRAPH AT	DD04SE	414.	12.42	65.	21.	7.	1.61
+ ROUTED TO	D04D05	308.	12.67	64.	21.	7.	1.61
+ HYDROGRAPH AT	D05	325.	12.17	35.	12.	4.	.16
+ DIVERSION TO	RD05	137.	11.92	13.	4.	1.	.16
+ HYDROGRAPH AT	DD05RE	325.	12.17	27.	8.	3.	.16
+ 2 COMBINED AT	CPD05	337.	12.67	89.	28.	9.	1.78
+ ROUTED TO	D05D14	272.	12.83	88.	28.	9.	1.78
+ DIVERSION TO	DD141S	150.	12.83	17.	4.	1.	1.78
+ HYDROGRAPH AT	DD141	122.	12.17	71.	24.	8.	1.78
+ ROUTED TO	D05D15	128.	12.50	70.	24.	8.	1.78
+ HYDROGRAPH AT	D11	780.	12.42	107.	33.	11.	.66
+ DIVERSION TO	RD11	750.	12.33	58.	16.	5.	.66
+ HYDROGRAPH AT	DD11RE	719.	12.50	60.	17.	6.	.66
+ DIVERSION TO	DD111S	591.	12.50	49.	14.	5.	.66
+ HYDROGRAPH AT	DD111	128.	12.50	12.	3.	1.	.66
+ DIVERSION TO	DD112S	46.	12.50	6.	2.	1.	.66
+ HYDROGRAPH AT	DD112	82.	12.50	6.	2.	1.	.66
+ ROUTED TO	D11D12	52.	12.67	6.	2.	1.	.66
+ HYDROGRAPH AT	D12	241.	12.58	53.	16.	5.	.35
+ DIVERSION TO	RD12	241.	12.58	28.	8.	3.	.35
+ HYDROGRAPH AT	DD12RE	225.	12.75	31.	9.	3.	.35
+ 2 COMBINED AT	CPD12	272.	12.75	36.	10.	3.	1.01
+ DIVERSION TO	DD121S	118.	12.75	13.	4.	1.	1.01
+ HYDROGRAPH AT	DD121	154.	12.75	23.	7.	2.	1.01
+ DIVERSION TO	DD122S	63.	12.75	11.	3.	1.	1.01
+ HYDROGRAPH AT	DD122	91.	12.75	13.	4.	1.	1.01
+ ROUTED TO	D12D13	52.	13.67	12.	4.	1.	1.01
+ HYDROGRAPH AT	D13	1138.	12.25	124.	36.	12.	1.03
+ DIVERSION TO	RD13	431.	12.00	30.	9.	3.	1.03
+ HYDROGRAPH AT	DD13RE	1138.	12.25	103.	27.	9.	1.03
+ HYDROGRAPH AT	DD04SE	647.	12.42	30.	7.	2.	1.61
+ ROUTED TO	D04D13	189.	13.50	30.	7.	2.	1.61
+ 3 COMBINED AT	CPD13	1138.	12.25	144.	38.	13.	3.65
+ DIVERSION TO	DD131S	210.	12.25	13.	3.	1.	3.65
HYDROGRAPH AT							

+	DD131	923.	12.25	130.	34.	11.	3.65
+ DIVERSION TO	DD132S	396.	12.25	39.	10.	3.	3.65
+ HYDROGRAPH AT	DD132	527.	12.25	91.	24.	8.	3.65
+ ROUTED TO	D13D14	449.	12.67	89.	24.	8.	3.65
+ HYDROGRAPH AT	D14	1097.	12.42	148.	46.	15.	.94
+ DIVERSION TO	RD14	1097.	12.42	117.	32.	11.	.94
+ HYDROGRAPH AT	DD14RE	490.	12.67	47.	14.	5.	.94
+ HYDROGRAPH AT	DD141	150.	12.83	17.	4.	1.	1.78
+ ROUTED TO	D0514A	122.	13.08	17.	4.	1.	1.78
+ 3 COMBINED AT	CPD14	980.	12.67	151.	42.	14.	4.76
+ ROUTED TO	SRD14	333.	13.17	149.	42.	14.	4.76
+ DIVERSION TO	DD142S	287.	13.17	135.	38.	13.	4.76
+ HYDROGRAPH AT	DD142	46.	13.17	14.	4.	1.	4.76
+ ROUTED TO	D14D15	42.	13.42	14.	4.	1.	4.76
+ HYDROGRAPH AT	D15	420.	12.17	44.	14.	5.	.22
+ 3 COMBINED AT	CPD15	417.	12.17	121.	42.	14.	4.98
+ ROUTED TO	D15D26	352.	12.42	120.	42.	14.	4.98
+ ROUTED TO	D15D28	320.	12.58	119.	42.	14.	4.98
+ HYDROGRAPH AT	D28	425.	12.17	38.	12.	4.	.25
+ 2 COMBINED AT	CPD28	475.	12.25	153.	53.	18.	5.23
+ ROUTED TO	D28AFR	462.	12.25	152.	53.	18.	5.23
+ HYDROGRAPH AT	D26	982.	12.25	101.	31.	10.	.64
+ DIVERSION TO	RD26	982.	12.25	98.	26.	9.	.64
+ HYDROGRAPH AT	DD26RE	31.	13.42	13.	5.	2.	.64
+ HYDROGRAPH AT	DD142	287.	13.17	135.	38.	13.	4.76
+ ROUTED TO	D14D26	283.	13.42	134.	38.	13.	4.76
+ 2 COMBINED AT	CPD26	308.	13.42	144.	42.	14.	5.40
+ ROUTED TO	D26D27	300.	13.58	143.	42.	14.	5.40
+ HYDROGRAPH AT	D27	498.	12.17	52.	17.	6.	.32
+ DIVERSION TO	RD27	100.	11.92	13.	4.	1.	.32
+ HYDROGRAPH AT	DD27RE	498.	12.17	45.	12.	4.	.32
+ 2 COMBINED AT	CPD27	491.	12.17	178.	54.	18.	5.72
+ ROUTED TO	SRD27	491.	12.17	178.	54.	18.	5.72
+ ROUTED TO	D27D42	345.	12.58	172.	54.	18.	5.72
+ HYDROGRAPH AT	D20	587.	12.33	70.	22.	7.	.50
+ DIVERSION TO	RD20	587.	12.33	70.	19.	6.	.50
+ HYDROGRAPH AT	DD20RE	10.	15.00	6.	2.	1.	.50
+ HYDROGRAPH AT	DD111	591.	12.50	49.	14.	5.	.66
+ ROUTED TO	D11D20	335.	12.92	46.	14.	5.	.66
+ 2 COMBINED AT	CPD20	334.	12.92	51.	16.	5.	1.16
ROUTED TO							

+		D20D21	250.	13.33	49.	16.	5.	1.16
+	HYDROGRAPH AT	D21	565.	12.33	72.	22.	7.	.50
+	DIVERSION TO	RD21	565.	12.33	72.	20.	7.	.50
+	HYDROGRAPH AT	DD21RE	9.	15.92	6.	2.	1.	.50
+	HYDROGRAPH AT	DD112	46.	12.50	6.	2.	1.	.66
+	ROUTED TO	D11D21	22.	13.33	5.	2.	1.	.66
+	HYDROGRAPH AT	DD121	118.	12.75	13.	4.	1.	1.01
+	ROUTED TO	D12D21	90.	13.00	13.	4.	1.	1.01
+	4 COMBINED AT	CPD21	327.	13.33	70.	23.	8.	2.00
+	DIVERSION TO	DD211S	218.	13.33	51.	17.	6.	2.00
+	HYDROGRAPH AT	DD211	109.	13.33	19.	6.	2.	2.00
+	DIVERSION TO	DD212S	54.	13.33	13.	4.	1.	2.00
+	HYDROGRAPH AT	DD212	55.	13.33	5.	2.	1.	2.00
+	ROUTED TO	D21D22	39.	13.67	5.	2.	1.	2.00
+	HYDROGRAPH AT	D22	562.	12.33	67.	21.	7.	.45
+	DIVERSION TO	RD22	562.	12.33	67.	19.	6.	.45
+	HYDROGRAPH AT	DD22RE	8.	16.75	5.	2.	1.	.45
+	HYDROGRAPH AT	DD122	63.	12.75	11.	3.	1.	1.01
+	ROUTED TO	D12D22	45.	13.42	10.	3.	1.	1.01
+	3 COMBINED AT	CPD22	79.	13.58	18.	6.	2.	2.46
+	ROUTED TO	D22D23	71.	13.75	18.	6.	2.	2.46
+	HYDROGRAPH AT	D23	556.	12.42	75.	22.	7.	.54
+	DIVERSION TO	RD23	556.	12.42	69.	18.	6.	.54
+	HYDROGRAPH AT	DD23RE	75.	13.08	13.	4.	1.	.54
+	HYDROGRAPH AT	DD131	210.	12.25	13.	3.	1.	3.65
+	ROUTED TO	D13D23	133.	12.50	13.	3.	1.	3.65
+	3 COMBINED AT	CPD23	130.	12.50	39.	13.	4.	5.64
+	DIVERSION TO	DD231S	13.	12.50	4.	1.	0.	5.64
+	HYDROGRAPH AT	DD231	117.	12.50	35.	12.	4.	5.64
+	DIVERSION TO	DD232S	14.	12.50	4.	1.	0.	5.64
+	HYDROGRAPH AT	DD232	103.	12.50	31.	10.	3.	5.64
+	ROUTED TO	D23D24	86.	12.75	31.	10.	3.	5.64
+	HYDROGRAPH AT	D24	538.	12.42	71.	21.	7.	.49
+	DIVERSION TO	RD24	538.	12.42	71.	21.	7.	.49
+	HYDROGRAPH AT	DD24RE	4.	21.08	2.	1.	0.	.49
+	HYDROGRAPH AT	DD132	396.	12.25	39.	10.	3.	3.65
+	ROUTED TO	D13D24	300.	12.50	39.	10.	3.	3.65
+	3 COMBINED AT	CPD24	343.	12.58	67.	21.	7.	6.13
+	ROUTED TO	D24D25	309.	12.75	67.	21.	7.	6.13
+	HYDROGRAPH AT	D25	574.	12.33	72.	22.	7.	.50
	DIVERSION TO							

+	RD25	574.	12.33	69.	19.	6.	.50
+ HYDROGRAPH AT	DD25RE	21.	13.58	9.	3.	1.	.50
+ 2 COMBINED AT	CPD25	309.	12.75	74.	23.	8.	6.63
+ ROUTED TO	D25D39	287.	12.83	72.	23.	8.	6.63
+ HYDROGRAPH AT	D39	113.	12.50	16.	4.	1.	.18
+ 2 COMBINED AT	CPD39	356.	12.83	85.	27.	9.	6.81
+ ROUTED TO	D39D42	291.	13.08	84.	27.	9.	6.81
+ HYDROGRAPH AT	D42	1317.	12.33	151.	46.	15.	.99
+ DIVERSION TO	RD42	1317.	12.33	135.	36.	12.	.99
+ HYDROGRAPH AT	DD42RE	215.	12.75	31.	10.	3.	.99
+ 3 COMBINED AT	CPD42	469.	13.00	259.	83.	28.	9.87
+ ROUTED TO	SRD42	356.	14.17	255.	83.	28.	9.87
+ ROUTED TO	D42D53	355.	14.25	253.	83.	28.	9.87
+ HYDROGRAPH AT	D53	180.	12.17	13.	4.	1.	.12
+ DIVERSION TO	RD53	180.	12.17	13.	4.	1.	.12
+ HYDROGRAPH AT	DD53RE	0.	.00	0.	0.	0.	.12
+ 2 COMBINED AT	CPD53	355.	14.25	253.	83.	28.	9.99
+ ROUTED TO	SRD53	529.	15.42	151.	49.	16.	9.99
+ ROUTED TO	D53D54	296.	15.75	149.	49.	16.	9.99
+ HYDROGRAPH AT	D43	643.	12.33	74.	23.	8.	.50
+ DIVERSION TO	RD43	643.	12.33	66.	18.	6.	.50
+ HYDROGRAPH AT	DD43RE	105.	12.75	16.	5.	2.	.50
+ ROUTED TO	D43D54	44.	13.75	15.	5.	2.	.50
+ HYDROGRAPH AT	D54	338.	12.25	29.	8.	3.	.27
+ DIVERSION TO	RD54	67.	12.00	5.	2.	1.	.27
+ HYDROGRAPH AT	DD54RE	338.	12.25	26.	7.	2.	.27
+ 3 COMBINED AT	CPD54	319.	12.25	154.	58.	19.	10.76
+ HYDROGRAPH AT	D44	588.	12.33	68.	20.	7.	.54
+ DIVERSION TO	RD44	524.	12.25	36.	10.	3.	.54
+ HYDROGRAPH AT	DD44RE	578.	12.42	39.	11.	4.	.54
+ HYDROGRAPH AT	D55	242.	12.25	23.	7.	2.	.19
+ DIVERSION TO	RD55	242.	12.25	18.	5.	2.	.19
+ HYDROGRAPH AT	DD55RE	89.	12.50	7.	2.	1.	.19
+ HYDROGRAPH AT	D56	267.	12.33	28.	8.	3.	.22
+ DIVERSION TO	RD56	37.	11.92	5.	2.	1.	.22
+ HYDROGRAPH AT	DD56RE	267.	12.33	26.	7.	2.	.22
+ 4 COMBINED AT	DUMMY	935.	12.42	182.	75.	25.	11.71
+ 3 COMBINED AT	DUMMY	8811.	12.50	1820.	580.	196.	32.72
+ HYDROGRAPH AT	D52	658.	12.42	82.	24.	8.	.59
+ DIVERSION TO	RD52	12.	10.58	7.	2.	1.	.59
HYDROGRAPH AT							

+		DD52RE	658.	12.42	81.	22.	7.	.59
+	ROUTED TO	D52D66	441.	13.08	81.	22.	7.	.59
+	HYDROGRAPH AT	D66	89.	13.00	23.	6.	2.	.30
+	2 COMBINED AT	CPD66	529.	13.08	103.	27.	9.	.89
+	ROUTED TO	D66D67	522.	13.17	103.	27.	9.	.89
+	HYDROGRAPH AT	D67	271.	12.58	42.	13.	4.	.32
+	2 COMBINED AT	CPD67	650.	12.67	144.	40.	13.	1.20
+	HYDROGRAPH AT	D76	76.	12.50	15.	5.	2.	.11
+	ROUTED TO	D76D77	75.	12.58	15.	5.	2.	.11
+	HYDROGRAPH AT	D77	602.	12.17	65.	22.	7.	.36
+	2 COMBINED AT	CPD77	629.	12.17	80.	26.	9.	.47
+	3 COMBINED AT	DUMMY	9498.	12.50	2003.	634.	214.	34.40
+	HYDROGRAPH AT	D35	119.	12.58	18.	5.	2.	.25
+	HYDROGRAPH AT	DD231	13.	12.50	4.	1.	0.	5.64
+	ROUTED TO	D23D35	8.	14.67	4.	1.	0.	5.64
+	2 COMBINED AT	CPD35	119.	12.58	22.	6.	2.	5.90
+	DIVERSION TO	DD35S	19.	12.58	4.	1.	0.	5.90
+	HYDROGRAPH AT	DD35SE	96.	12.58	18.	5.	2.	5.90
+	ROUTED TO	D35D38	90.	12.75	17.	5.	2.	5.90
+	HYDROGRAPH AT	D38	91.	13.08	25.	6.	2.	.32
+	HYDROGRAPH AT	DD232	14.	12.50	4.	1.	0.	5.64
+	ROUTED TO	D23D38	10.	13.33	4.	1.	0.	5.64
+	3 COMBINED AT	CPD38	170.	12.92	45.	12.	4.	6.22
+	ROUTED TO	D38D40	163.	13.17	45.	12.	4.	6.22
+	HYDROGRAPH AT	D32	361.	12.25	38.	12.	4.	.25
+	DIVERSION TO	RD32	361.	12.25	38.	12.	4.	.25
+	HYDROGRAPH AT	DD32RE	0.	.00	0.	0.	0.	.25
+	DIVERSION TO	DD32S	0.	.00	0.	0.	0.	.25
+	HYDROGRAPH AT	DD32SE	0.	.00	0.	0.	0.	.25
+	ROUTED TO	D32D33	0.	.00	0.	0.	0.	.25
+	HYDROGRAPH AT	D31	574.	12.33	58.	17.	6.	.50
+	DIVERSION TO	RD31	574.	12.33	58.	17.	6.	.50
+	HYDROGRAPH AT	DD31RE	0.	.00	0.	0.	0.	.50
+	HYDROGRAPH AT	DD211	218.	13.33	51.	17.	6.	2.00
+	ROUTED TO	D21D31	206.	13.42	50.	17.	6.	2.00
+	2 COMBINED AT	CPD31	206.	13.42	50.	17.	6.	2.50
+	ROUTED TO	D31D33	199.	13.58	50.	17.	6.	2.50
+	HYDROGRAPH AT	D33	377.	12.25	38.	12.	4.	.25
+	DIVERSION TO	RD33	377.	12.25	35.	9.	3.	.25
+	HYDROGRAPH AT	DD33RE	31.	12.75	8.	2.	1.	.25
	3 COMBINED AT							

+	CPD33	210.	13.58	56.	19.	6.	3.00
+ DIVERSION TO	DD331S	115.	13.58	30.	10.	3.	3.00
+ HYDROGRAPH AT	DD331	95.	13.58	26.	9.	3.	3.00
+ DIVERSION TO	DD332S	40.	13.58	12.	4.	1.	3.00
+ HYDROGRAPH AT	DD332	55.	13.58	13.	5.	2.	3.00
+ ROUTED TO	D33D34	47.	14.00	13.	5.	2.	3.00
+ HYDROGRAPH AT	D34	166.	12.83	37.	9.	3.	.50
+ DIVERSION TO	RD34	100.	12.42	5.	1.	0.	.50
+ HYDROGRAPH AT	DD34RE	166.	12.83	32.	8.	3.	.50
+ HYDROGRAPH AT	DD212	54.	13.33	13.	4.	1.	2.00
+ ROUTED TO	D21D34	40.	14.25	13.	4.	1.	2.00
+ 3 COMBINED AT	CPD34	166.	12.83	56.	17.	6.	3.50
+ ROUTED TO	D34D36	154.	13.17	54.	17.	6.	3.50
+ HYDROGRAPH AT	D36	278.	12.33	33.	10.	3.	.25
+ DIVERSION TO	RD36	278.	12.33	21.	6.	2.	.25
+ HYDROGRAPH AT	DD36RE	220.	12.50	15.	4.	1.	.25
+ HYDROGRAPH AT	DD35SE	19.	12.58	4.	1.	0.	5.90
+ ROUTED TO	D35D36	17.	12.83	3.	1.	0.	5.90
+ 3 COMBINED AT	CPD36	220.	12.50	68.	21.	7.	7.64
+ DIVERSION TO	DD361S	202.	12.50	62.	19.	6.	7.64
+ HYDROGRAPH AT	DD361	18.	12.50	5.	2.	1.	7.64
+ DIVERSION TO	DD362S	11.	12.50	4.	1.	0.	7.64
+ HYDROGRAPH AT	DD362	7.	12.50	1.	0.	0.	7.64
+ ROUTED TO	D36D40	4.	14.17	1.	0.	0.	7.64
+ HYDROGRAPH AT	D40	136.	12.50	21.	5.	2.	.24
+ 3 COMBINED AT	CPD40	215.	13.00	64.	17.	6.	8.20
+ ROUTED TO	D4049A	213.	13.08	64.	17.	6.	8.20
+ ROUTED TO	D4049B	210.	13.17	64.	17.	6.	8.20
+ HYDROGRAPH AT	D47	546.	13.00	117.	34.	11.	1.00
+ DIVERSION TO	RD47	546.	13.00	117.	34.	11.	1.00
+ HYDROGRAPH AT	DD47RE	0.	.00	0.	0.	0.	1.00
+ HYDROGRAPH AT	DD32SE	0.	.00	0.	0.	0.	.25
+ ROUTED TO	D3247A	0.	.00	0.	0.	0.	.25
+ ROUTED TO	D3247B	0.	.00	0.	0.	0.	.25
+ HYDROGRAPH AT	DD331	115.	13.58	30.	10.	3.	3.00
+ ROUTED TO	D3347A	101.	13.92	30.	10.	3.	3.00
+ ROUTED TO	D3347B	88.	14.50	29.	10.	3.	3.00
+ 3 COMBINED AT	CPD47	88.	14.58	29.	10.	3.	3.99
+ DIVERSION TO	DD47S	78.	14.58	26.	9.	3.	3.99
+ HYDROGRAPH AT	DD47SE	11.	14.58	3.	1.	0.	3.99
ROUTED TO							

+		D47D48	9.	15.67	3.	1.	0.	3.99
+	HYDROGRAPH AT	D48	644.	12.83	116.	33.	11.	1.00
+	DIVERSION TO	RD48	644.	12.83	105.	27.	9.	1.00
+	HYDROGRAPH AT	DD48RE	135.	13.58	18.	6.	2.	1.00
+	HYDROGRAPH AT	DD332	40.	13.58	12.	4.	1.	3.00
+	ROUTED TO	D33D48	32.	14.75	12.	4.	1.	3.00
+	HYDROGRAPH AT	DD361	202.	12.50	62.	19.	6.	7.64
+	ROUTED TO	D3648A	160.	13.50	62.	19.	6.	7.64
+	ROUTED TO	D3648B	154.	13.58	61.	19.	6.	7.64
+	4 COMBINED AT	CPD48	216.	13.83	83.	28.	9.	9.63
+	DIVERSION TO	DD481S	184.	13.83	70.	24.	8.	9.63
+	HYDROGRAPH AT	DD481	32.	13.83	12.	4.	1.	9.63
+	DIVERSION TO	DD482S	8.	13.83	3.	1.	0.	9.63
+	HYDROGRAPH AT	DD482	24.	13.83	9.	3.	1.	9.63
+	ROUTED TO	D48D49	21.	14.00	9.	3.	1.	9.63
+	HYDROGRAPH AT	D49	724.	12.25	75.	24.	8.	.49
+	DIVERSION TO	RD49	25.	11.08	11.	4.	1.	.49
+	HYDROGRAPH AT	DD49RE	724.	12.25	73.	20.	7.	.49
+	HYDROGRAPH AT	DD362	11.	12.50	4.	1.	0.	7.64
+	ROUTED TO	D36D49	8.	15.58	4.	1.	0.	7.64
+	4 COMBINED AT	CPD49	724.	12.25	147.	42.	14.	10.69
+	ROUTED TO	D49D63	596.	12.42	140.	40.	13.	10.69
+	HYDROGRAPH AT	D60	155.	12.75	32.	8.	3.	.40
+	HYDROGRAPH AT	DD481	184.	13.83	70.	24.	8.	9.63
+	ROUTED TO	D48D60	158.	14.08	70.	24.	8.	9.63
+	2 COMBINED AT	CPD60	175.	14.08	95.	31.	10.	10.04
+	ROUTED TO	D60D63	173.	14.08	95.	31.	10.	10.04
+	HYDROGRAPH AT	D63	107.	12.50	15.	4.	1.	.22
+	HYDROGRAPH AT	DD482	8.	13.83	3.	1.	0.	9.63
+	ROUTED TO	D48D63	5.	17.00	3.	1.	0.	9.63
+	4 COMBINED AT	CPD63	752.	12.42	246.	74.	25.	11.31
+	ROUTED TO	SRD63	292.	14.33	198.	74.	25.	11.31
+	ROUTED TO	D63D64	291.	14.58	197.	74.	25.	11.31
+	HYDROGRAPH AT	D62	116.	12.58	18.	5.	2.	.25
+	DIVERSION TO	DD621S	81.	12.58	13.	3.	1.	.25
+	HYDROGRAPH AT	DD621	35.	12.58	5.	1.	0.	.25
+	DIVERSION TO	DD622S	11.	12.58	2.	0.	0.	.25
+	HYDROGRAPH AT	DD622	24.	12.58	3.	1.	0.	.25
+	ROUTED TO	D62D64	18.	13.17	3.	1.	0.	.25
+	HYDROGRAPH AT	D64	129.	12.58	21.	6.	2.	.27
	3 COMBINED AT							

+	CPD64	293.	14.50	207.	79.	27.	11.84
+ ROUTED TO	D64D74	291.	14.83	206.	79.	27.	11.84
+ HYDROGRAPH AT	D73A	160.	12.42	21.	5.	2.	.24
+ HYDROGRAPH AT	DD621	81.	12.58	13.	3.	1.	.25
+ ROUTED TO	D6273A	74.	12.92	13.	3.	1.	.25
+ 2 COMBINED AT	CPD73A	184.	12.58	34.	9.	3.	.49
+ ROUTED TO	D73A74	174.	12.75	34.	9.	3.	.49
+ HYDROGRAPH AT	D74	96.	12.83	22.	5.	2.	.31
+ HYDROGRAPH AT	DD622	11.	12.58	2.	0.	0.	.25
+ ROUTED TO	D62D74	6.	15.58	2.	0.	0.	.25
+ 4 COMBINED AT	CPD74	316.	13.17	246.	92.	31.	12.39
+ ROUTED TO	SRD74	262.	15.83	198.	88.	31.	12.39
+ HYDROGRAPH AT	D78A	53.	12.92	13.	3.	1.	.18
+ 2 COMBINED AT	CPD78A	263.	15.83	200.	91.	32.	12.58
+ ROUTED TO	D78ACP	262.	15.92	200.	91.	32.	12.58
+ HYDROGRAPH AT	D41	235.	12.42	31.	8.	3.	.25
+ ROUTED TO	D41D50	151.	13.58	31.	8.	3.	.25
+ HYDROGRAPH AT	D50	216.	13.00	61.	16.	5.	.50
+ 2 COMBINED AT	CPD50	317.	13.50	91.	23.	8.	.76
+ ROUTED TO	D5064A	277.	14.25	90.	23.	8.	.76
+ HYDROGRAPH AT	D64A	158.	12.92	38.	9.	3.	.50
+ 2 COMBINED AT	CPD64A	306.	14.08	126.	33.	11.	1.25
+ ROUTED TO	64A74A	303.	14.42	125.	33.	11.	1.25
+ HYDROGRAPH AT	D74A	223.	12.75	51.	14.	5.	.49
+ 2 COMBINED AT	CPD74A	337.	13.00	173.	47.	16.	1.75
+ ROUTED TO	D74A78	334.	13.00	173.	47.	16.	1.75
+ 2 COMBINED AT	CP7874	484.	14.58	338.	132.	46.	14.32
+ ROUTED TO	78A78B	481.	14.75	337.	132.	46.	14.32
+ HYDROGRAPH AT	D06	616.	12.33	77.	23.	8.	.46
+ DIVERSION TO	RD06	616.	12.33	60.	16.	5.	.46
+ HYDROGRAPH AT	DD06RE	252.	12.67	24.	7.	2.	.46
+ DIVERSION TO	DD06S	0.	.00	0.	0.	0.	.46
+ HYDROGRAPH AT	DD06SE	252.	12.67	24.	7.	2.	.46
+ ROUTED TO	D06D07	162.	12.75	23.	7.	2.	.46
+ HYDROGRAPH AT	D07	919.	12.50	134.	40.	13.	.89
+ DIVERSION TO	RD07	919.	12.50	116.	31.	10.	.89
+ HYDROGRAPH AT	DD07RE	250.	13.00	29.	9.	3.	.89
+ 2 COMBINED AT	CPD07	348.	13.00	51.	16.	5.	1.35
+ ROUTED TO	D07D02	252.	13.08	50.	16.	5.	1.35
+ HYDROGRAPH AT	D01	1347.	12.58	212.	63.	21.	1.56
DIVERSION TO							

+	RD01	1347.	12.58	184.	49.	16.	1.56
+ HYDROGRAPH AT	DD01RE	334.	13.17	46.	14.	5.	1.56
+ ROUTED TO	D01D02	146.	14.42	42.	14.	5.	1.56
+ HYDROGRAPH AT	D02	1750.	12.50	266.	80.	27.	1.84
+ DIVERSION TO	RD02	1750.	12.50	237.	63.	21.	1.84
+ HYDROGRAPH AT	DD02RE	378.	13.08	53.	17.	6.	1.84
+ 3 COMBINED AT	CPD02	617.	13.08	139.	46.	15.	4.76
+ ROUTED TO	D02D10	470.	13.33	137.	46.	15.	4.76
+ HYDROGRAPH AT	D09	360.	12.33	42.	13.	4.	.26
+ DIVERSION TO	RD09	360.	12.33	29.	8.	3.	.26
+ HYDROGRAPH AT	DD09RE	225.	12.50	18.	5.	2.	.26
+ ROUTED TO	D09D10	172.	12.58	17.	5.	2.	.26
+ HYDROGRAPH AT	DD06SE	0.	.00	0.	0.	0.	.46
+ ROUTED TO	D06D10	0.	.00	0.	0.	0.	.46
+ HYDROGRAPH AT	D10	774.	12.33	100.	31.	10.	.63
+ DIVERSION TO	RD10	774.	12.33	70.	19.	6.	.63
+ HYDROGRAPH AT	DD10RE	479.	12.58	40.	12.	4.	.63
+ 4 COMBINED AT	CPD10	637.	12.58	182.	61.	20.	5.65
+ ROUTED TO	D10D19	442.	13.58	179.	61.	20.	5.65
+ HYDROGRAPH AT	D08	467.	12.58	75.	23.	8.	.51
+ DIVERSION TO	RD08	467.	12.58	48.	13.	4.	.51
+ HYDROGRAPH AT	DD08RE	367.	12.75	35.	10.	3.	.51
+ ROUTED TO	D08D16	179.	13.58	33.	10.	3.	.51
+ HYDROGRAPH AT	D16	207.	12.75	45.	12.	4.	.52
+ 2 COMBINED AT	CPD16	258.	13.58	76.	22.	7.	1.03
+ DIVERSION TO	DD161S	209.	13.58	60.	17.	6.	1.03
+ HYDROGRAPH AT	DD161	49.	13.58	16.	5.	2.	1.03
+ DIVERSION TO	DD162S	19.	13.58	7.	2.	1.	1.03
+ HYDROGRAPH AT	DD162	30.	13.58	9.	3.	1.	1.03
+ ROUTED TO	D16D18	27.	13.75	9.	3.	1.	1.03
+ HYDROGRAPH AT	D18	321.	12.17	28.	9.	3.	.20
+ DIVERSION TO	RD18	321.	12.17	28.	9.	3.	.20
+ HYDROGRAPH AT	DD18RE	0.	21.42	0.	0.	0.	.20
+ 2 COMBINED AT	CPD18	27.	13.75	9.	3.	1.	1.23
+ ROUTED TO	D18D19	26.	13.92	9.	3.	1.	1.23
+ HYDROGRAPH AT	D17	324.	12.17	28.	9.	3.	.20
+ DIVERSION TO	RD17	324.	12.17	28.	8.	3.	.20
+ HYDROGRAPH AT	DD17RE	2.	20.17	1.	0.	0.	.20
+ ROUTED TO	D17D19	2.	21.67	1.	0.	0.	.20
+ HYDROGRAPH AT	D19	509.	12.33	69.	21.	7.	.51
DIVERSION TO							

+	RD19	509.	12.33	64.	17.	6.	.51
+ HYDROGRAPH AT	DD19RE	52.	13.17	11.	4.	1.	.51
+ 4 COMBINED AT	CPD19	416.	13.67	183.	63.	21.	7.58
+ ROUTED TO	D19D30	385.	13.92	179.	63.	21.	7.58
+ HYDROGRAPH AT	D29	193.	12.75	41.	11.	4.	.51
+ HYDROGRAPH AT	DD161	209.	13.58	60.	17.	6.	1.03
+ ROUTED TO	D16D29	169.	14.25	59.	17.	6.	1.03
+ 2 COMBINED AT	CPD29	216.	13.42	98.	28.	9.	1.54
+ ROUTED TO	D29D30	210.	13.67	98.	28.	9.	1.54
+ HYDROGRAPH AT	D30	292.	12.92	69.	17.	6.	.91
+ HYDROGRAPH AT	DD162	19.	13.58	7.	2.	1.	1.03
+ ROUTED TO	D16D30	15.	15.17	7.	2.	1.	1.03
+ 4 COMBINED AT	CPD30	712.	13.08	324.	105.	35.	9.01
+ ROUTED TO	D30D46	677.	13.33	322.	105.	35.	9.01
+ HYDROGRAPH AT	D45	384.	12.58	59.	17.	6.	.49
+ DIVERSION TO	RD45	384.	12.58	33.	9.	3.	.49
+ HYDROGRAPH AT	DD45RE	315.	12.75	30.	8.	3.	.49
+ DIVERSION TO	DD451S	52.	12.75	4.	1.	0.	.49
+ HYDROGRAPH AT	DD451	263.	12.75	25.	7.	2.	.49
+ DIVERSION TO	DD452S	104.	12.75	11.	3.	1.	.49
+ HYDROGRAPH AT	DD452	158.	12.75	14.	4.	1.	.49
+ ROUTED TO	D45D46	90.	13.25	13.	4.	1.	.49
+ HYDROGRAPH AT	D46	861.	12.50	130.	40.	13.	.92
+ DIVERSION TO	RD46	861.	12.50	130.	38.	13.	.92
+ HYDROGRAPH AT	DD46RE	8.	20.50	5.	1.	0.	.92
+ 3 COMBINED AT	CPD46	735.	13.33	324.	106.	35.	10.41
+ ROUTED TO	D46D58	689.	13.42	322.	106.	35.	10.41
+ DIVERSION TO	SSPILL	352.	13.42	114.	39.	13.	10.41
+ HYDROGRAPH AT	RMSBSN	472.	14.58	209.	67.	22.	10.41
+ HYDROGRAPH AT	RMSBSN	352.	13.42	114.	39.	13.	10.41
+ ROUTED TO	SRREEM	33.	20.42	32.	27.	13.	10.41
+ 2 COMBINED AT	CPRMS	494.	14.58	232.	94.	35.	10.41
+ ROUTED TO	RRMS	469.	14.67	231.	94.	35.	10.41
+ HYDROGRAPH AT	D57	173.	12.75	37.	10.	3.	.48
+ HYDROGRAPH AT	DD451	52.	12.75	4.	1.	0.	.49
+ ROUTED TO	D45D57	29.	13.33	4.	1.	0.	.49
+ 2 COMBINED AT	CPD57	173.	12.75	41.	11.	4.	.97
+ ROUTED TO	D57D58	164.	13.08	41.	11.	4.	.97
+ HYDROGRAPH AT	D58	361.	12.83	80.	21.	7.	.92
+ HYDROGRAPH AT	DD452	104.	12.75	11.	3.	1.	.49
ROUTED TO							

+	D45D58	44.	14.42	11.	3.	1.	.49
+ 4 COMBINED AT	CPD58	700.	13.33	334.	123.	45.	11.81
+ ROUTED TO	D5869A	670.	13.58	331.	123.	45.	11.81
+ HYDROGRAPH AT	D68A	149.	12.42	17.	5.	2.	.24
+ ROUTED TO	68A69A	122.	12.67	17.	5.	2.	.24
+ HYDROGRAPH AT	D69A	218.	12.58	33.	8.	3.	.46
+ 3 COMBINED AT	CPD69A	714.	13.50	367.	133.	49.	12.52
+ ROUTED TO	D69A70	680.	14.17	361.	132.	49.	12.52
+ HYDROGRAPH AT	D68	126.	12.50	19.	5.	2.	.25
+ DIVERSION TO	DD681S	100.	12.50	15.	4.	1.	.25
+ HYDROGRAPH AT	DD681	27.	12.50	4.	1.	0.	.25
+ DIVERSION TO	DD682S	9.	12.50	1.	0.	0.	.25
+ HYDROGRAPH AT	DD682	18.	12.50	3.	1.	0.	.25
+ ROUTED TO	D68D69	16.	12.92	3.	1.	0.	.25
+ HYDROGRAPH AT	D69	168.	12.75	34.	9.	3.	.46
+ 2 COMBINED AT	CPD69	182.	12.75	37.	9.	3.	.71
+ DIVERSION TO	DD691S	15.	12.75	3.	1.	0.	.71
+ HYDROGRAPH AT	DD691	167.	12.75	34.	8.	3.	.71
+ DIVERSION TO	DD692S	12.	12.75	2.	1.	0.	.71
+ HYDROGRAPH AT	DD692	154.	12.75	31.	8.	3.	.71
+ ROUTED TO	D69D70	149.	13.00	31.	8.	3.	.71
+ HYDROGRAPH AT	D70	307.	12.17	25.	7.	2.	.26
+ HYDROGRAPH AT	D70A	133.	12.58	22.	6.	2.	.27
+ ROUTED TO	D70A70	109.	13.25	21.	6.	2.	.27
+ 4 COMBINED AT	CPD70	748.	14.00	404.	148.	54.	13.76
+ ROUTED TO	SRD70	267.	16.50	243.	136.	52.	13.76
+ ROUTED TO	D70D71	267.	16.58	243.	136.	52.	13.76
+ HYDROGRAPH AT	D71	134.	12.50	20.	5.	2.	.24
+ 2 COMBINED AT	CPD71	267.	16.58	243.	138.	53.	14.00
+ ROUTED TO	D71D72	267.	16.67	243.	138.	53.	14.00
+ HYDROGRAPH AT	D59	286.	13.08	77.	19.	6.	.99
+ HYDROGRAPH AT	DD47SE	78.	14.58	26.	9.	3.	3.99
+ ROUTED TO	D47D59	73.	14.92	25.	9.	3.	3.99
+ 2 COMBINED AT	CPD59	286.	13.08	96.	29.	10.	4.99
+ DIVERSION TO	DD59S	269.	13.08	90.	27.	9.	4.99
+ HYDROGRAPH AT	DD59SE	14.	13.08	5.	1.	0.	4.99
+ ROUTED TO	D59D61	14.	13.42	5.	1.	0.	4.99
+ HYDROGRAPH AT	D61	97.	13.00	25.	6.	2.	.35
+ 2 COMBINED AT	CPD61	105.	13.08	29.	7.	2.	5.34
+ ROUTED TO	D6172A	104.	13.08	29.	7.	2.	5.34
HYDROGRAPH AT							

+	D71A	108.	12.58	18.	5.	2.	.24
+ HYDROGRAPH AT	DD59SE	269.	13.08	90.	27.	9.	4.99
+ ROUTED TO	D5971A	246.	13.83	88.	27.	9.	4.99
+ 2 COMBINED AT	CPD71A	257.	13.75	102.	31.	10.	5.22
+ ROUTED TO	71A72A	254.	13.92	102.	31.	10.	5.22
+ HYDROGRAPH AT	D72A	113.	12.58	19.	5.	2.	.25
+ 3 COMBINED AT	CPD72A	327.	13.75	147.	43.	14.	5.83
+ ROUTED TO	D72A72	325.	13.83	147.	43.	14.	5.83
+ HYDROGRAPH AT	D72	135.	12.58	21.	5.	2.	.26
+ 3 COMBINED AT	CPD72	458.	12.75	331.	174.	65.	20.09
+ ROUTED TO	D72D73	453.	12.83	331.	174.	65.	20.09
+ HYDROGRAPH AT	D73	136.	12.92	23.	6.	2.	.28
+ 2 COMBINED AT	CPD73	573.	12.83	348.	178.	66.	20.37
+ ROUTED TO	D73D78	541.	13.00	345.	178.	66.	20.37
+ HYDROGRAPH AT	B02	673.	12.33	86.	27.	9.	.54
+ DIVERSION TO	RB02	479.	12.17	33.	10.	3.	.54
+ HYDROGRAPH AT	DB02RE	673.	12.33	62.	17.	6.	.54
+ DIVERSION TO	DB02LR	0.	.00	0.	0.	0.	.54
+ HYDROGRAPH AT	DB02SD	673.	12.33	62.	17.	6.	.54
+ HYDROGRAPH AT	B04	609.	12.08	41.	12.	4.	.31
+ DIVERSION TO	RB04	226.	11.92	12.	4.	1.	.31
+ HYDROGRAPH AT	DB04RE	609.	12.08	32.	9.	3.	.31
+ ROUTED TO	B04B02	257.	12.50	31.	9.	3.	.31
+ HYDROGRAPH AT	DB02SD	0.	.00	0.	0.	0.	.54
+ 2 COMBINED AT	CPB02	257.	12.50	31.	9.	3.	.86
+ DIVERSION TO	LR02LR	0.	.00	0.	0.	0.	.86
+ HYDROGRAPH AT	LR02SD	255.	12.50	31.	8.	3.	.86
+ ROUTED TO	LR2D78	146.	12.83	31.	8.	3.	.86
+ HYDROGRAPH AT	D78B	102.	13.67	38.	10.	3.	.53
+ 5 COMBINED AT	CPD78B	1062.	13.08	704.	307.	111.	32.08
+ ROUTED TO	78B79B	1049.	13.17	701.	307.	111.	32.08
+ HYDROGRAPH AT	D51	474.	12.25	46.	13.	4.	.29
+ DIVERSION TO	RD51	197.	12.00	10.	3.	1.	.29
+ HYDROGRAPH AT	DD51RE	474.	12.25	38.	10.	3.	.29
+ ROUTED TO	D51D65	243.	13.08	37.	10.	3.	.29
+ HYDROGRAPH AT	D65	240.	12.83	55.	14.	5.	.69
+ 2 COMBINED AT	CPD65	467.	13.00	91.	24.	8.	.98
+ ROUTED TO	D65D75	362.	14.00	89.	24.	8.	.98
+ HYDROGRAPH AT	D79A	133.	12.42	15.	4.	1.	.17
+ HYDROGRAPH AT	D75	402.	12.75	95.	27.	9.	.88
3 COMBINED AT							

+	CPD75	463.	12.67	194.	54.	18.	2.04
+ ROUTED TO	SRD75	419.	14.17	182.	54.	18.	2.04
+ ROUTED TO	D7579B	408.	14.42	181.	54.	18.	2.04
+ HYDROGRAPH AT	D79B	370.	12.25	28.	7.	2.	.32
+ 3 COMBINED AT	CPD79B	1197.	13.25	849.	354.	127.	34.44
+ ROUTED TO	D79B80	1196.	13.25	849.	354.	127.	34.44
+ HYDROGRAPH AT	D80	199.	12.17	14.	4.	1.	.13
+ 2 COMBINED AT	CPD80	1197.	13.25	851.	357.	128.	34.57
+ HYDROGRAPH AT	B01	193.	12.08	16.	5.	2.	.10
+ 3 COMBINED AT	DUMMY	9672.	12.50	2629.	892.	317.	69.06
+ HYDROGRAPH AT	B03	255.	12.50	30.	8.	3.	.34
+ ROUTED TO	B03B05	232.	12.67	30.	8.	3.	.34
+ HYDROGRAPH AT	B05	468.	12.25	44.	12.	4.	.40
+ 2 COMBINED AT	CPB05	521.	12.25	74.	20.	7.	.73
+ ROUTED TO	B05B06	468.	12.50	74.	20.	7.	.73
+ HYDROGRAPH AT	B06	598.	12.17	60.	18.	6.	.40
+ 2 COMBINED AT	CPB06	796.	12.25	133.	39.	13.	1.13
+ ROUTED TO	B06B15	678.	12.67	133.	38.	13.	1.13
+ HYDROGRAPH AT	B07	299.	12.25	26.	7.	2.	.25
+ DIVERSION TO	RB07	299.	12.25	15.	4.	1.	.25
+ HYDROGRAPH AT	DB07RE	229.	12.33	12.	3.	1.	.25
+ ROUTED TO	B07B09	114.	12.75	12.	3.	1.	.25
+ HYDROGRAPH AT	B08	383.	12.08	21.	5.	2.	.23
+ ROUTED TO	B08B09	282.	12.17	21.	5.	2.	.23
+ HYDROGRAPH AT	B09	769.	12.17	65.	20.	7.	.43
+ DIVERSION TO	RB09	699.	12.08	36.	10.	3.	.43
+ HYDROGRAPH AT	DB09RE	616.	12.25	35.	10.	3.	.43
+ 3 COMBINED AT	CPB09	887.	12.25	67.	18.	6.	.91
+ ROUTED TO	SRB11	36.	13.50	32.	17.	6.	.91
+ ROUTED TO	B09B11	36.	14.17	31.	17.	6.	.91
+ HYDROGRAPH AT	B10	251.	12.08	15.	4.	1.	.16
+ ROUTED TO	B1011A	215.	12.25	15.	4.	1.	.16
+ ROUTED TO	B1011B	152.	12.42	15.	4.	1.	.16
+ HYDROGRAPH AT	B11	1121.	12.25	113.	34.	11.	.82
+ DIVERSION TO	RB11	12.	8.75	8.	3.	1.	.82
+ HYDROGRAPH AT	DB11RE	1121.	12.25	113.	31.	10.	.82
+ 3 COMBINED AT	CPB11	1190.	12.25	147.	51.	18.	1.89
+ ROUTED TO	B11B12	1103.	12.42	147.	51.	18.	1.89
+ HYDROGRAPH AT	B12	415.	12.33	45.	13.	4.	.38
+ DIVERSION TO	RB12	4.	9.58	3.	1.	0.	.38
HYDROGRAPH AT							

+	DB12RE	415.	12.33	45.	12.	4.	.38
+ 2 COMBINED AT	CPB12	1501.	12.42	190.	63.	22.	2.27
+ ROUTED TO	B12B14	1462.	12.42	190.	63.	22.	2.27
+ HYDROGRAPH AT	B13	615.	12.25	47.	12.	4.	.49
+ ROUTED TO	B13B14	480.	12.42	47.	12.	4.	.49
+ HYDROGRAPH AT	B14	453.	12.25	48.	15.	5.	.33
+ DIVERSION TO	RB14	453.	12.25	45.	12.	4.	.33
+ HYDROGRAPH AT	DB14RE	30.	12.83	9.	3.	1.	.33
+ 3 COMBINED AT	CPB14	1936.	12.42	244.	78.	27.	3.09
+ ROUTED TO	B14B15	1701.	12.50	243.	78.	27.	3.09
+ HYDROGRAPH AT	B15	527.	12.25	66.	22.	7.	.38
+ 3 COMBINED AT	CPB15	2450.	12.58	435.	134.	47.	4.60
+ HYDROGRAPH AT	B16	197.	12.08	15.	5.	2.	.11
+ DIVERSION TO	RB16	139.	12.00	6.	2.	1.	.11
+ HYDROGRAPH AT	DB16RE	187.	12.17	10.	3.	1.	.11
+ ROUTED TO	B16B17	89.	12.25	10.	3.	1.	.11
+ HYDROGRAPH AT	B17	475.	12.25	47.	15.	5.	.33
+ DIVERSION TO	RB17	261.	12.08	17.	5.	2.	.33
+ HYDROGRAPH AT	DB17RE	475.	12.25	36.	10.	3.	.33
+ 2 COMBINED AT	CPB17	563.	12.25	45.	12.	4.	.45
+ ROUTED TO	B17B18	465.	12.33	45.	12.	4.	.45
+ HYDROGRAPH AT	B18	221.	12.58	30.	9.	3.	.28
+ DIVERSION TO	RB18	94.	12.17	7.	2.	1.	.28
+ HYDROGRAPH AT	DB18RE	221.	12.58	26.	7.	2.	.28
+ 2 COMBINED AT	CPB18	628.	12.42	70.	19.	6.	.73
+ ROUTED TO	B18B19	544.	12.58	69.	19.	6.	.73
+ HYDROGRAPH AT	B19	230.	12.08	21.	7.	2.	.12
+ 2 COMBINED AT	CPB19	561.	12.58	88.	26.	9.	.85
+ HYDROGRAPH AT	B20	397.	12.17	41.	13.	4.	.23
+ 4 COMBINED AT	DUMMY	11807.	12.58	3052.	1021.	362.	74.73
+ HYDROGRAPH AT	B21	289.	12.25	29.	9.	3.	.24
+ DIVERSION TO	RB21	289.	12.25	23.	6.	2.	.24
+ HYDROGRAPH AT	DB21RE	98.	12.50	8.	2.	1.	.24
+ ROUTED TO	B21B22	61.	12.67	8.	2.	1.	.24
+ HYDROGRAPH AT	B22	390.	12.17	37.	12.	4.	.22
+ 2 COMBINED AT	CPB22	389.	12.17	43.	14.	5.	.46
+ HYDROGRAPH AT	B23	362.	12.33	44.	13.	4.	.27
+ DIVERSION TO	RB23	4.	8.42	3.	1.	0.	.27
+ HYDROGRAPH AT	DB23RE	362.	12.33	44.	12.	4.	.27
+ ROUTED TO	B23B24	341.	12.42	44.	12.	4.	.27
HYDROGRAPH AT							

+	B24	289.	12.17	28.	9.	3.	.19
+ DIVERSION TO	RB24	289.	12.17	22.	6.	2.	.19
+ HYDROGRAPH AT	DB24RE	100.	12.42	8.	3.	1.	.19
+ 2 COMBINED AT	CPB24	439.	12.42	51.	15.	5.	.46
+ ROUTED TO	B24B25	337.	12.67	51.	15.	5.	.46
+ HYDROGRAPH AT	B25	292.	12.17	22.	7.	2.	.20
+ 2 COMBINED AT	CPB25	352.	12.58	73.	21.	7.	.66
+ HYDROGRAPH AT	B26	485.	12.17	48.	15.	5.	.31
+ DIVERSION TO	RB26	485.	12.17	32.	9.	3.	.31
+ HYDROGRAPH AT	DB26RE	339.	12.33	21.	6.	2.	.31
+ ROUTED TO	B26B27	125.	13.00	21.	6.	2.	.31
+ HYDROGRAPH AT	B27	534.	12.25	65.	21.	7.	.36
+ 2 COMBINED AT	CPB27	533.	12.25	83.	28.	9.	.67
+ 4 COMBINED AT	DUMMY	12254.	12.50	3193.	1067.	378.	76.53
+ HYDROGRAPH AT	B76	421.	12.33	46.	14.	5.	.39
+ DIVERSION TO	RB76	421.	12.33	46.	14.	5.	.39
+ HYDROGRAPH AT	DB76RE	0.	.00	0.	0.	0.	.39
+ ROUTED TO	B7676A	0.	.00	0.	0.	0.	.39
+ HYDROGRAPH AT	B75	554.	12.25	49.	14.	5.	.42
+ DIVERSION TO	RB75	554.	12.25	49.	14.	5.	.42
+ HYDROGRAPH AT	DB75RE	0.	.00	0.	0.	0.	.42
+ ROUTED TO	B75A75	0.	.00	0.	0.	0.	.42
+ HYDROGRAPH AT	B75A	414.	12.25	43.	13.	4.	.28
+ 2 COMBINED AT	CPB75A	413.	12.25	43.	13.	4.	.70
+ ROUTED TO	B7576A	379.	12.33	42.	13.	4.	.70
+ HYDROGRAPH AT	B76A	528.	12.17	46.	15.	5.	.31
+ 3 COMBINED AT	CPB76A	773.	12.17	88.	27.	9.	1.40
+ ROUTED TO	B76A78	773.	12.17	88.	27.	9.	1.40
+ HYDROGRAPH AT	B77	1206.	12.33	137.	40.	13.	.83
+ DIVERSION TO	RB77	1035.	12.17	58.	16.	5.	.83
+ HYDROGRAPH AT	DB77RE	1206.	12.33	89.	24.	8.	.83
+ ROUTED TO	B77B78	621.	13.00	86.	24.	8.	.83
+ HYDROGRAPH AT	B78	471.	12.67	85.	25.	8.	.57
+ DIVERSION TO	RB78	200.	12.25	19.	6.	2.	.57
+ HYDROGRAPH AT	DB78RE	471.	12.67	73.	20.	7.	.57
+ 2 COMBINED AT	CPB78A	948.	12.92	158.	44.	15.	1.40
+ DIVERSION TO	RB78BN	631.	12.75	37.	9.	3.	1.40
+ HYDROGRAPH AT	DB78BN	948.	12.92	122.	34.	11.	1.40
+ 2 COMBINED AT	CPB78B	1022.	12.92	203.	61.	20.	2.80
+ ROUTED TO	B78B79	735.	13.58	202.	61.	20.	2.80
HYDROGRAPH AT							

+	B79	990.	12.33	118.	35.	12.	.85
+ DIVERSION TO	RB79	322.	12.00	24.	8.	3.	.85
+ HYDROGRAPH AT	DB79RE	990.	12.33	104.	28.	9.	.85
+ 2 COMBINED AT	CPB79	1028.	12.42	304.	88.	30.	3.64
+ ROUTED TO	B79B80	962.	12.50	303.	88.	30.	3.64
+ HYDROGRAPH AT	B80	350.	12.25	38.	12.	4.	.27
+ DIVERSION TO	RB80	350.	12.25	37.	10.	3.	.27
+ HYDROGRAPH AT	DB80RE	8.	14.00	4.	1.	0.	.27
+ 2 COMBINED AT	CPB80	962.	12.50	307.	89.	30.	3.91
+ ROUTED TO	SRB80	944.	12.50	306.	89.	30.	3.91
+ ROUTED TO	B80B81	858.	12.83	304.	89.	30.	3.91
+ HYDROGRAPH AT	B81	393.	12.25	40.	12.	4.	.25
+ DIVERSION TO	RB81	4.	9.58	3.	1.	0.	.25
+ HYDROGRAPH AT	DB81RE	393.	12.25	40.	11.	4.	.25
+ 2 COMBINED AT	CPB81	896.	12.75	339.	100.	34.	4.16
+ ROUTED TO	SRB81	826.	12.92	338.	100.	34.	4.16
+ ROUTED TO	B81B84	814.	13.00	337.	100.	34.	4.16
+ HYDROGRAPH AT	B82	220.	12.25	22.	7.	2.	.15
+ DIVERSION TO	RB82	220.	12.25	21.	6.	2.	.15
+ HYDROGRAPH AT	DB82RE	7.	13.33	3.	1.	0.	.15
+ ROUTED TO	B82B83	7.	13.58	3.	1.	0.	.15
+ HYDROGRAPH AT	B83	449.	12.08	41.	13.	4.	.22
+ DIVERSION TO	RB83	5.	6.50	4.	1.	0.	.22
+ HYDROGRAPH AT	DB83RE	449.	12.08	41.	12.	4.	.22
+ 2 COMBINED AT	CPB83	449.	12.08	42.	13.	4.	.37
+ ROUTED TO	SRB83	29.	12.58	25.	12.	4.	.37
+ ROUTED TO	B83B84	29.	12.75	25.	12.	4.	.37
+ HYDROGRAPH AT	B71	1005.	12.42	140.	44.	15.	.96
+ DIVERSION TO	RB71	1005.	12.42	136.	37.	12.	.96
+ HYDROGRAPH AT	DB71RE	39.	13.92	18.	7.	2.	.96
+ ROUTED TO	B71B72	27.	16.42	17.	7.	2.	.96
+ HYDROGRAPH AT	B72	1028.	12.50	144.	42.	14.	1.12
+ DIVERSION TO	RB72	680.	12.25	46.	13.	4.	1.12
+ HYDROGRAPH AT	DB72RE	1028.	12.50	109.	29.	10.	1.12
+ 2 COMBINED AT	CPB72	1026.	12.50	117.	36.	12.	2.08
+ ROUTED TO	B72B74	985.	12.58	116.	36.	12.	2.08
+ HYDROGRAPH AT	B73	286.	12.42	36.	11.	4.	.30
+ DIVERSION TO	RB73	159.	12.17	11.	3.	1.	.30
+ HYDROGRAPH AT	DB73RE	286.	12.42	29.	8.	3.	.30
+ ROUTED TO	SRB73	10.	13.58	9.	6.	3.	.30
ROUTED TO							

+	B73B74	10.	14.75	9.	6.	3.	.30
+ HYDROGRAPH AT	B74	215.	12.08	21.	7.	2.	.11
+ DIVERSION TO	RB74	79.	11.92	8.	2.	1.	.11
+ HYDROGRAPH AT	DB74RE	215.	12.08	17.	5.	2.	.11
+ 3 COMBINED AT	CPB74	1003.	12.58	137.	46.	16.	2.49
+ ROUTED TO	SRB74	153.	13.25	82.	39.	15.	2.49
+ ROUTED TO	B74B84	152.	13.42	81.	39.	15.	2.49
+ HYDROGRAPH AT	B84	401.	12.17	42.	13.	4.	.22
+ DIVERSION TO	RB84	4.	6.42	3.	1.	0.	.22
+ HYDROGRAPH AT	DB84RE	401.	12.17	42.	12.	4.	.22
+ 4 COMBINED AT	CPB84	942.	13.08	456.	156.	55.	7.24
+ ROUTED TO	SRB84	437.	15.08	345.	145.	52.	7.24
+ HYDROGRAPH AT	B28	1073.	12.42	144.	45.	15.	.96
+ DIVERSION TO	RB28	9.	1.08	1.	0.	0.	.96
+ HYDROGRAPH AT	DB28RE	1073.	12.42	144.	45.	15.	.96
+ HYDROGRAPH AT	B29	278.	12.25	33.	11.	4.	.18
+ DIVERSION TO	RB29	266.	12.25	21.	6.	2.	.18
+ HYDROGRAPH AT	DB29RE	240.	12.33	16.	5.	2.	.18
+ HYDROGRAPH AT	B30	306.	12.17	36.	12.	4.	.17
+ DIVERSION TO	RB30	250.	12.08	18.	5.	2.	.17
+ HYDROGRAPH AT	DB30RE	291.	12.25	24.	7.	2.	.17
+ ROUTED TO	SRB30	33.	12.75	23.	7.	2.	.17
+ HYDROGRAPH AT	B31	1009.	12.25	108.	34.	11.	.68
+ DIVERSION TO	RB31	575.	12.08	42.	12.	4.	.68
+ HYDROGRAPH AT	DB31RE	1009.	12.25	79.	22.	7.	.68
+ ROUTED TO	SRB31	43.	13.33	39.	22.	7.	.68
+ 2 COMBINED AT	DUMMY	76.	12.92	62.	29.	10.	.85
+ 5 COMBINED AT	DUMMY	13084.	12.50	3540.	1217.	433.	85.75
+ HYDROGRAPH AT	B32	831.	12.42	108.	32.	11.	.82
+ DIVERSION TO	RB32	620.	12.25	45.	13.	4.	.82
+ HYDROGRAPH AT	DB32RE	831.	12.42	72.	20.	7.	.82
+ ROUTED TO	SRB32	0.	.00	0.	0.	0.	.82
+ ROUTED TO	B32B33	0.	.00	0.	0.	0.	.82
+ HYDROGRAPH AT	B33	242.	12.33	24.	7.	2.	.28
+ DIVERSION TO	RB33	186.	12.17	9.	2.	1.	.28
+ HYDROGRAPH AT	DB33RE	242.	12.33	16.	4.	1.	.28
+ 2 COMBINED AT	CPB33	241.	12.33	16.	4.	1.	1.10
+ HYDROGRAPH AT	B34	241.	12.08	17.	5.	2.	.13
+ HYDROGRAPH AT	B38	191.	12.50	27.	7.	2.	.34
+ DIVERSION TO	RB38	4.	11.83	1.	0.	0.	.34
HYDROGRAPH AT							

+	DB38RE	191.	12.50	27.	7.	2.	.34
+ ROUTED TO	B38B39	132.	13.50	26.	7.	2.	.34
+ HYDROGRAPH AT	B37	169.	12.92	40.	10.	3.	.47
+ ROUTED TO	B37B39	146.	13.92	40.	10.	3.	.47
+ HYDROGRAPH AT	B39	214.	13.00	57.	14.	5.	.77
+ 3 COMBINED AT	CPB39	387.	13.58	121.	31.	10.	1.58
+ ROUTED TO	SRB39	240.	14.25	105.	27.	9.	1.58
+ HYDROGRAPH AT	B35	228.	12.17	18.	5.	2.	.14
+ HYDROGRAPH AT	B36	119.	12.08	7.	2.	1.	.06
+ 4 COMBINED AT	DUMMY	559.	12.08	141.	39.	13.	1.91
+ 3 COMBINED AT	DUMMY	13210.	12.50	3642.	1244.	442.	88.76
+ HYDROGRAPH AT	B40	266.	12.58	53.	15.	5.	.51
+ HYDROGRAPH AT	DD681	100.	12.50	15.	4.	1.	.25
+ ROUTED TO	D68B40	91.	12.75	15.	4.	1.	.25
+ 2 COMBINED AT	CPB40	350.	12.67	67.	19.	6.	.77
+ DIVERSION TO	DB401S	206.	12.67	39.	11.	4.	.77
+ HYDROGRAPH AT	DB401	143.	12.67	29.	8.	3.	.77
+ DIVERSION TO	DB402S	55.	12.67	12.	3.	1.	.77
+ HYDROGRAPH AT	DB402	88.	12.67	17.	5.	2.	.77
+ ROUTED TO	B40B41	82.	13.00	17.	5.	2.	.77
+ HYDROGRAPH AT	B41	496.	12.92	92.	24.	8.	.95
+ HYDROGRAPH AT	DD682	9.	12.50	1.	0.	0.	.25
+ ROUTED TO	D68B41	6.	13.92	1.	0.	0.	.25
+ HYDROGRAPH AT	DD691	15.	12.75	3.	1.	0.	.71
+ ROUTED TO	D69B41	14.	13.33	3.	1.	0.	.71
+ 4 COMBINED AT	CPB41	581.	12.92	112.	30.	10.	2.18
+ DIVERSION TO	DB41S	552.	12.92	107.	29.	10.	2.18
+ HYDROGRAPH AT	DB41SE	29.	12.92	5.	1.	0.	2.18
+ ROUTED TO	B41B43	27.	13.08	5.	1.	0.	2.18
+ HYDROGRAPH AT	B43	112.	13.33	40.	10.	3.	.54
+ HYDROGRAPH AT	DD692	12.	12.75	2.	1.	0.	.71
+ ROUTED TO	D69B43	6.	16.92	2.	1.	0.	.71
+ 3 COMBINED AT	CPB43	133.	13.33	46.	12.	4.	2.72
+ ROUTED TO	B43B45	127.	13.75	46.	12.	4.	2.72
+ HYDROGRAPH AT	B44	187.	12.75	39.	10.	3.	.52
+ HYDROGRAPH AT	DB401	206.	12.67	39.	11.	4.	.77
+ ROUTED TO	B40B44	166.	13.58	39.	11.	4.	.77
+ 2 COMBINED AT	CPB44	248.	12.75	78.	21.	7.	1.29
+ DIVERSION TO	DB441S	30.	12.75	10.	3.	1.	1.29
+ HYDROGRAPH AT	DB441	217.	12.75	69.	19.	6.	1.29
DIVERSION TO							

+		DB442S	19.	12.75	6.	2.	1.	1.29
+	HYDROGRAPH AT	DB442	198.	12.75	63.	17.	6.	1.29
+	ROUTED TO	B44B45	195.	12.92	62.	17.	6.	1.29
+	HYDROGRAPH AT	B45	292.	12.92	72.	19.	6.	.81
+	HYDROGRAPH AT	DB402	55.	12.67	12.	3.	1.	.77
+	ROUTED TO	B40B45	50.	13.08	12.	3.	1.	.77
+	HYDROGRAPH AT	DB41SE	552.	12.92	107.	29.	10.	2.18
+	ROUTED TO	B41B45	401.	14.33	106.	28.	10.	2.18
+	5 COMBINED AT	CPB45	680.	14.25	293.	79.	27.	4.05
+	ROUTED TO	B45B47	634.	14.75	290.	79.	27.	4.05
+	HYDROGRAPH AT	L01	268.	12.17	25.	8.	3.	.16
+	DIVERSION TO	RL01	268.	12.17	18.	5.	2.	.16
+	HYDROGRAPH AT	DL01RE	157.	12.33	9.	3.	1.	.16
+	ROUTED TO	L01L03	58.	12.75	8.	3.	1.	.16
+	HYDROGRAPH AT	L03	958.	12.33	116.	35.	12.	.79
+	DIVERSION TO	RL03	958.	12.33	116.	34.	11.	.79
+	HYDROGRAPH AT	DL03RE	1.	19.83	1.	0.	0.	.79
+	HYDROGRAPH AT	L20	390.	12.42	47.	14.	5.	.35
+	DIVERSION TO	RL20	390.	12.42	41.	11.	4.	.35
+	HYDROGRAPH AT	DL20RE	88.	12.83	9.	3.	1.	.35
+	ROUTED TO	L20L03	46.	13.25	9.	3.	1.	.35
+	3 COMBINED AT	CPL03	60.	13.25	17.	5.	2.	1.29
+	DIVERSION TO	DL03S	37.	12.67	15.	5.	2.	1.29
+	HYDROGRAPH AT	DL03SE	23.	13.25	2.	0.	0.	1.29
+	ROUTED TO	L03L04	18.	13.58	2.	0.	0.	1.29
+	HYDROGRAPH AT	L04	663.	12.42	82.	24.	8.	.63
+	DIVERSION TO	RL04	663.	12.42	81.	22.	7.	.63
+	HYDROGRAPH AT	DL04RE	8.	15.67	6.	2.	1.	.63
+	2 COMBINED AT	CPL04	17.	13.58	6.	2.	1.	1.93
+	DIVERSION TO	DL04S	0.	.00	0.	0.	0.	1.93
+	HYDROGRAPH AT	DL04SE	17.	13.58	6.	2.	1.	1.93
+	ROUTED TO	L04L05	6.	17.25	5.	2.	1.	1.93
+	HYDROGRAPH AT	L02	1737.	12.58	279.	85.	28.	1.88
+	DIVERSION TO	RL02	1737.	12.58	219.	59.	20.	1.88
+	HYDROGRAPH AT	DL02RE	891.	12.92	88.	26.	9.	1.88
+	ROUTED TO	L02L05	584.	13.08	87.	26.	9.	1.88
+	HYDROGRAPH AT	L05	660.	12.33	84.	27.	9.	.49
+	DIVERSION TO	RL05	660.	12.33	61.	17.	6.	.49
+	HYDROGRAPH AT	DL05RE	406.	12.50	33.	10.	3.	.49
+	3 COMBINED AT	CPL05	636.	13.08	121.	38.	13.	4.30
	ROUTED TO							

+	L05L09	574.	13.17	119.	38.	13.	4.30
+ HYDROGRAPH AT	L09	577.	12.42	74.	23.	8.	.49
+ DIVERSION TO	RL09	577.	12.42	74.	20.	7.	.49
+ HYDROGRAPH AT	DL09RE	10.	15.17	6.	2.	1.	.49
+ 2 COMBINED AT	CPL09	574.	13.17	123.	40.	13.	4.78
+ ROUTED TO	L0913B	540.	13.25	122.	40.	13.	4.78
+ DIVERSION TO	DL13BR	314.	13.25	51.	15.	5.	4.78
+ HYDROGRAPH AT	DL13BN	225.	13.25	71.	25.	8.	4.78
+ HYDROGRAPH AT	DL13BN	314.	13.25	51.	15.	5.	4.78
+ ROUTED TO	SRL13B	22.	15.67	21.	15.	5.	4.78
+ 2 COMBINED AT	CPL13B	245.	13.25	92.	40.	13.	4.78
+ ROUTED TO	L13B13	244.	13.33	92.	40.	13.	4.78
+ HYDROGRAPH AT	L13	183.	12.83	40.	10.	3.	.48
+ HYDROGRAPH AT	L06	876.	12.33	94.	28.	9.	.70
+ DIVERSION TO	RL06	876.	12.33	94.	28.	9.	.70
+ HYDROGRAPH AT	DL06RE	0.	.00	0.	0.	0.	.70
+ DIVERSION TO	DL06S	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	DL06SE	0.	.00	0.	0.	0.	.70
+ ROUTED TO	L06L07	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	L07	775.	12.33	88.	26.	9.	.63
+ DIVERSION TO	RL07	775.	12.33	87.	23.	8.	.63
+ HYDROGRAPH AT	DL07RE	17.	14.08	9.	3.	1.	.63
+ HYDROGRAPH AT	DL03SE	37.	12.67	15.	5.	2.	1.29
+ ROUTED TO	L0307A	37.	13.58	14.	5.	2.	1.29
+ ROUTED TO	L0307B	37.	13.83	14.	5.	2.	1.29
+ 3 COMBINED AT	CPL07	50.	14.08	22.	8.	3.	2.62
+ DIVERSION TO	DL07S	10.	14.08	5.	2.	1.	2.62
+ HYDROGRAPH AT	DL07SE	40.	14.08	18.	6.	2.	2.62
+ ROUTED TO	L07L08	35.	14.25	17.	6.	2.	2.62
+ HYDROGRAPH AT	L08	612.	12.42	83.	25.	8.	.49
+ DIVERSION TO	RL08	612.	12.42	75.	20.	7.	.49
+ HYDROGRAPH AT	DL08RE	110.	13.00	16.	5.	2.	.49
+ HYDROGRAPH AT	DL04SE	0.	.00	0.	0.	0.	1.93
+ ROUTED TO	L04L08	0.	.00	0.	0.	0.	1.93
+ 3 COMBINED AT	CPL08	110.	13.00	32.	11.	4.	3.74
+ ROUTED TO	L08L12	60.	14.08	31.	11.	4.	3.74
+ HYDROGRAPH AT	L10	845.	12.42	103.	30.	10.	.84
+ DIVERSION TO	RL10	845.	12.42	65.	17.	6.	.84
+ HYDROGRAPH AT	DL10RE	647.	12.58	46.	13.	4.	.84
+ ROUTED TO	L10L11	442.	12.83	45.	13.	4.	.84
HYDROGRAPH AT							

+		DL06SE	0.	.00	0.	0.	0.	.70
+	ROUTED TO	L06L11	0.	.00	0.	0.	0.	.70
+	HYDROGRAPH AT	L11	744.	12.33	94.	29.	10.	.62
+	DIVERSION TO	RL11	744.	12.33	89.	24.	8.	.62
+	HYDROGRAPH AT	DL11RE	56.	13.17	15.	5.	2.	.62
+	HYDROGRAPH AT	DL07SE	10.	14.08	5.	2.	1.	2.62
+	ROUTED TO	L07L11	8.	15.42	4.	2.	1.	2.62
+	4 COMBINED AT	CPL11	440.	12.83	62.	19.	6.	4.09
+	DIVERSION TO	DL11S	3.	12.83	0.	0.	0.	4.09
+	HYDROGRAPH AT	DL11SE	435.	12.83	62.	19.	6.	4.09
+	ROUTED TO	L11L12	356.	13.00	61.	19.	6.	4.09
+	HYDROGRAPH AT	L12	304.	12.58	43.	12.	4.	.36
+	DIVERSION TO	RL12	243.	12.42	17.	5.	2.	.36
+	HYDROGRAPH AT	DL12RE	304.	12.58	27.	7.	2.	.36
+	3 COMBINED AT	CPL12	492.	12.92	113.	36.	12.	5.56
+	DIVERSION TO	DL121S	86.	12.92	20.	6.	2.	5.56
+	HYDROGRAPH AT	DL121	405.	12.92	93.	30.	10.	5.56
+	DIVERSION TO	DL122S	5.	12.92	1.	0.	0.	5.56
+	HYDROGRAPH AT	DL122	400.	12.92	92.	30.	10.	5.56
+	ROUTED TO	L12L13	320.	13.25	89.	30.	10.	5.56
+	3 COMBINED AT	CPL13	633.	13.25	194.	72.	24.	8.90
+	ROUTED TO	L13DS5	624.	13.33	194.	72.	24.	8.90
+	ROUTED TO	DS5L19	612.	13.42	194.	72.	24.	8.90
+	HYDROGRAPH AT	L14	250.	12.25	18.	4.	1.	.23
+	ROUTED TO	L14L15	172.	12.33	18.	4.	1.	.23
+	HYDROGRAPH AT	L15	412.	12.25	31.	8.	3.	.37
+	2 COMBINED AT	CPL15	554.	12.25	48.	12.	4.	.60
+	ROUTED TO	L15L16	443.	12.42	48.	12.	4.	.60
+	HYDROGRAPH AT	L16	181.	12.75	34.	9.	3.	.50
+	2 COMBINED AT	CPL16	583.	12.50	82.	21.	7.	1.10
+	ROUTED TO	L16L17	559.	12.58	82.	21.	7.	1.10
+	HYDROGRAPH AT	L17	586.	12.33	72.	23.	8.	.50
+	DIVERSION TO	RL17	586.	12.33	72.	23.	8.	.50
+	HYDROGRAPH AT	DL17RE	0.	.00	0.	0.	0.	.50
+	2 COMBINED AT	CPL17	559.	12.58	82.	21.	7.	1.61
+	DIVERSION TO	DL17S	20.	12.58	2.	0.	0.	1.61
+	HYDROGRAPH AT	DL17SE	538.	12.58	81.	20.	7.	1.61
+	ROUTED TO	L17L18	473.	12.92	80.	20.	7.	1.61
+	HYDROGRAPH AT	L18	175.	12.83	37.	9.	3.	.50
+	HYDROGRAPH AT	DL11SE	3.	12.83	0.	0.	0.	4.09
	ROUTED TO							

+		L11L18	0.	16.25	0.	0.	0.	4.09
+	HYDROGRAPH AT	DL121	86.	12.92	20.	6.	2.	5.56
+	ROUTED TO	L12L18	60.	13.58	19.	6.	2.	5.56
+	4 COMBINED AT	CPL18	618.	12.92	129.	34.	11.	7.67
+	DIVERSION TO	DL181S	9.	12.92	1.	0.	0.	7.67
+	HYDROGRAPH AT	DL181	608.	12.92	128.	34.	11.	7.67
+	DIVERSION TO	DL182S	24.	12.92	6.	1.	0.	7.67
+	HYDROGRAPH AT	DL182	584.	12.92	122.	32.	11.	7.67
+	ROUTED TO	L18L19	540.	13.25	122.	32.	11.	7.67
+	HYDROGRAPH AT	L19	173.	12.75	37.	10.	3.	.49
+	HYDROGRAPH AT	DL122	5.	12.92	1.	0.	0.	5.56
+	ROUTED TO	L12L19	2.	15.67	1.	0.	0.	5.56
+	4 COMBINED AT	CPL19	1180.	13.33	333.	109.	37.	11.50
+	ROUTED TO	L19DS7	1175.	13.33	333.	109.	37.	11.50
+	ROUTED TO	DS7L27	1167.	13.42	332.	109.	37.	11.50
+	HYDROGRAPH AT	L23	899.	12.33	72.	18.	6.	.90
+	ROUTED TO	L23L24	820.	12.42	72.	18.	6.	.90
+	HYDROGRAPH AT	L24	179.	12.75	35.	9.	3.	.50
+	2 COMBINED AT	CPL24	943.	12.42	106.	27.	9.	1.40
+	ROUTED TO	L24L26	792.	12.67	106.	27.	9.	1.40
+	HYDROGRAPH AT	L25	70.	13.00	18.	4.	1.	.24
+	ROUTED TO	L25L26	67.	13.17	18.	4.	1.	.24
+	HYDROGRAPH AT	DL181	9.	12.92	1.	0.	0.	7.67
+	ROUTED TO	L18L26	7.	13.50	1.	0.	0.	7.67
+	HYDROGRAPH AT	DL17SE	20.	12.58	2.	0.	0.	1.61
+	ROUTED TO	L17L26	6.	14.75	2.	0.	0.	1.61
+	HYDROGRAPH AT	L26	252.	12.83	54.	13.	4.	.76
+	5 COMBINED AT	CPL26	998.	12.67	169.	42.	14.	10.07
+	DIVERSION TO	DL26S	6.	12.67	1.	0.	0.	10.07
+	HYDROGRAPH AT	DL26SE	992.	12.67	168.	42.	14.	10.07
+	ROUTED TO	L26L27	946.	12.83	168.	42.	14.	10.07
+	HYDROGRAPH AT	L27	200.	12.75	43.	11.	4.	.51
+	HYDROGRAPH AT	DL182	24.	12.92	6.	1.	0.	7.67
+	ROUTED TO	L18L27	18.	14.50	5.	1.	0.	7.67
+	4 COMBINED AT	CPL27	1735.	13.25	524.	158.	53.	14.41
+	ROUTED TO	L27L34	1726.	13.33	523.	158.	53.	14.41
+	DIVERSION TO	DL34BR	809.	13.33	162.	40.	13.	14.41
+	HYDROGRAPH AT	DL34BN	917.	13.33	361.	117.	39.	14.41
+	HYDROGRAPH AT	DL34BN	809.	13.33	162.	40.	13.	14.41
+	ROUTED TO	SRL34B	79.	14.42	74.	40.	13.	14.41
	2 COMBINED AT							

+	CPL34	984.	13.33	429.	158.	53.	14.41
+ ROUTED TO	L34B34	981.	13.33	428.	158.	53.	14.41
+ HYDROGRAPH AT	L33	491.	12.58	60.	16.	5.	.65
+ DIVERSION TO	DL33S	1.	12.58	0.	0.	0.	.65
+ HYDROGRAPH AT	DL33SE	490.	12.58	60.	16.	5.	.65
+ ROUTED TO	L33L34	441.	12.67	60.	16.	5.	.65
+ HYDROGRAPH AT	L34	177.	12.83	38.	10.	3.	.51
+ HYDROGRAPH AT	DL26SE	6.	12.67	1.	0.	0.	10.07
+ ROUTED TO	L26L34	3.	15.08	1.	0.	0.	10.07
+ 4 COMBINED AT	CPL34B	1242.	12.92	508.	180.	60.	15.58
+ ROUTED TO	34DS11	1240.	12.92	508.	180.	60.	15.58
+ ROUTED TO	DS1139	1240.	13.00	508.	180.	60.	15.58
+ HYDROGRAPH AT	L39A	135.	12.42	19.	5.	2.	.26
+ 2 COMBINED AT	CPL39A	1291.	12.92	522.	184.	62.	15.84
+ DIVERSION TO	DL39BR	406.	12.92	93.	23.	8.	15.84
+ HYDROGRAPH AT	DL39BN	886.	12.92	429.	160.	54.	15.84
+ HYDROGRAPH AT	L28	343.	12.25	27.	7.	2.	.31
+ ROUTED TO	L28L29	260.	12.42	27.	7.	2.	.31
+ HYDROGRAPH AT	L29	230.	12.25	21.	5.	2.	.25
+ 2 COMBINED AT	CPL29	456.	12.33	47.	12.	4.	.56
+ DIVERSION TO	DL29S	228.	12.33	24.	6.	2.	.56
+ HYDROGRAPH AT	DL29SE	228.	12.33	24.	6.	2.	.56
+ ROUTED TO	L29L36	190.	12.67	24.	6.	2.	.56
+ HYDROGRAPH AT	L35	552.	12.25	43.	11.	4.	.52
+ HYDROGRAPH AT	DL29SE	228.	12.33	24.	6.	2.	.56
+ ROUTED TO	L29L35	168.	12.92	23.	6.	2.	.56
+ 2 COMBINED AT	CPL35	552.	12.25	67.	17.	6.	1.07
+ ROUTED TO	L35L37	322.	13.00	66.	17.	6.	1.07
+ HYDROGRAPH AT	L37	408.	12.25	31.	8.	3.	.40
+ HYDROGRAPH AT	L36	484.	12.25	35.	9.	3.	.47
+ DIVERSION TO	RL36	484.	12.25	35.	9.	3.	.47
+ HYDROGRAPH AT	DL36RE	0.	.00	0.	0.	0.	.47
+ 4 COMBINED AT	CPL36	457.	12.92	119.	30.	10.	1.94
+ ROUTED TO	L36L38	417.	13.17	118.	30.	10.	1.94
+ HYDROGRAPH AT	L30	718.	12.25	79.	24.	8.	.54
+ DIVERSION TO	RL30	718.	12.25	69.	19.	6.	.54
+ HYDROGRAPH AT	DL30RE	131.	12.67	18.	6.	2.	.54
+ ROUTED TO	L30L31	82.	12.92	17.	6.	2.	.54
+ HYDROGRAPH AT	L31	709.	12.17	64.	20.	7.	.42
+ DIVERSION TO	RL31	709.	12.17	59.	16.	5.	.42
HYDROGRAPH AT							

+		DL31RE	50.	12.67	13.	4.	1.	.42
+	2 COMBINED AT	CPL31	114.	12.92	30.	10.	3.	.96
+	ROUTED TO	L31L32	103.	13.08	29.	10.	3.	.96
+	HYDROGRAPH AT	L32	395.	12.17	27.	7.	2.	.35
+	2 COMBINED AT	CPL32	393.	12.17	54.	17.	6.	1.31
+	ROUTED TO	L32L38	208.	12.83	52.	17.	6.	1.31
+	HYDROGRAPH AT	L38	384.	12.75	81.	21.	7.	1.00
+	HYDROGRAPH AT	DL33SE	1.	12.58	0.	0.	0.	.65
+	ROUTED TO	L33L38	0.	13.58	0.	0.	0.	.65
+	4 COMBINED AT	CPL38	911.	12.83	247.	67.	22.	4.90
+	ROUTED TO	L38L39	889.	13.17	246.	67.	22.	4.90
+	HYDROGRAPH AT	L39	137.	12.50	19.	5.	2.	.25
+	HYDROGRAPH AT	DL39BN	406.	12.92	93.	23.	8.	15.84
+	3 COMBINED AT	CPL39B	1177.	13.08	317.	85.	28.	20.34
+	ROUTED TO	SRL39B	97.	15.75	96.	78.	28.	20.34
+	2 COMBINED AT	CPL39	932.	13.00	509.	232.	80.	20.34
+	ROUTED TO	39DS13	931.	13.08	508.	231.	80.	20.34
+	ROUTED TO	DS1344	930.	13.17	507.	231.	80.	20.34
+	HYDROGRAPH AT	L41	272.	12.33	26.	7.	2.	.25
+	DIVERSION TO	DL41S	171.	12.33	18.	5.	2.	.25
+	HYDROGRAPH AT	DL41SE	101.	12.33	8.	2.	1.	.25
+	ROUTED TO	L41L42	86.	12.50	8.	2.	1.	.25
+	HYDROGRAPH AT	L42	584.	12.50	70.	19.	6.	.74
+	2 COMBINED AT	CPL42	668.	12.50	79.	21.	7.	.99
+	DIVERSION TO	DL421S	344.	12.50	40.	10.	3.	.99
+	HYDROGRAPH AT	DL421	324.	12.50	39.	10.	3.	.99
+	DIVERSION TO	DL422S	69.	12.50	10.	3.	1.	.99
+	HYDROGRAPH AT	DL422	255.	12.50	29.	8.	3.	.99
+	ROUTED TO	L42L43	203.	12.92	29.	8.	3.	.99
+	HYDROGRAPH AT	L43	979.	12.42	97.	25.	8.	1.00
+	2 COMBINED AT	CPL43	1075.	12.42	126.	33.	11.	1.99
+	DIVERSION TO	DL431S	5.	12.42	0.	0.	0.	1.99
+	HYDROGRAPH AT	DL431	1070.	12.42	125.	33.	11.	1.99
+	DIVERSION TO	DL432S	23.	12.42	2.	1.	0.	1.99
+	HYDROGRAPH AT	DL432	1047.	12.42	123.	32.	11.	1.99
+	ROUTED TO	L43L44	857.	12.58	123.	32.	11.	1.99
+	HYDROGRAPH AT	L44	173.	12.75	38.	10.	3.	.48
+	3 COMBINED AT	CPL44	1570.	12.75	630.	263.	91.	22.80
+	ROUTED TO	44DS14	1562.	12.83	630.	263.	91.	22.80
+	ROUTED TO	DS1449	1562.	12.83	629.	262.	91.	22.80
	HYDROGRAPH AT							

+	L40	541.	12.33	48.	12.	4.	.61
+ ROUTED TO	L40L45	439.	12.50	48.	12.	4.	.61
+ HYDROGRAPH AT	L45	530.	12.25	42.	10.	3.	.50
+ 2 COMBINED AT	CPL45	781.	12.33	90.	22.	7.	1.11
+ ROUTED TO	L45L46	708.	12.58	90.	22.	7.	1.11
+ HYDROGRAPH AT	L46	513.	12.33	47.	12.	4.	.49
+ HYDROGRAPH AT	DL41SE	171.	12.33	18.	5.	2.	.25
+ ROUTED TO	L41L46	135.	12.67	18.	5.	2.	.25
+ 3 COMBINED AT	CPL46	1172.	12.50	154.	39.	13.	1.85
+ DIVERSION TO	DL461S	122.	12.50	33.	9.	3.	1.85
+ HYDROGRAPH AT	DL461	1050.	12.50	121.	31.	10.	1.85
+ DIVERSION TO	DL462S	90.	12.50	12.	3.	1.	1.85
+ HYDROGRAPH AT	DL462	959.	12.50	109.	28.	9.	1.85
+ ROUTED TO	L46L47	838.	12.58	109.	28.	9.	1.85
+ HYDROGRAPH AT	L47	323.	12.67	43.	11.	4.	.50
+ HYDROGRAPH AT	DL421	344.	12.50	40.	10.	3.	.99
+ ROUTED TO	L42L47	310.	12.67	40.	10.	3.	.99
+ 3 COMBINED AT	CPL47	1444.	12.67	190.	49.	16.	3.09
+ DIVERSION TO	DL471S	185.	12.25	45.	12.	4.	3.09
+ HYDROGRAPH AT	DL471	1259.	12.67	145.	37.	12.	3.09
+ DIVERSION TO	DL472S	1063.	12.67	125.	32.	11.	3.09
+ HYDROGRAPH AT	DL472	196.	12.67	20.	5.	2.	3.09
+ ROUTED TO	L47L48	154.	13.00	20.	5.	2.	3.09
+ HYDROGRAPH AT	L48	758.	12.50	87.	23.	8.	1.00
+ HYDROGRAPH AT	DL422	69.	12.50	10.	3.	1.	.99
+ ROUTED TO	L42L48	54.	13.08	10.	3.	1.	.99
+ HYDROGRAPH AT	DL431	5.	12.42	0.	0.	0.	1.99
+ ROUTED TO	L43L48	3.	13.08	0.	0.	0.	1.99
+ 4 COMBINED AT	CPL48	766.	12.50	116.	31.	10.	5.09
+ DIVERSION TO	DL481S	7.	12.50	0.	0.	0.	5.09
+ HYDROGRAPH AT	DL481	760.	12.50	116.	30.	10.	5.09
+ DIVERSION TO	DL482S	10.	12.50	1.	0.	0.	5.09
+ HYDROGRAPH AT	DL482	749.	12.50	114.	30.	10.	5.09
+ ROUTED TO	L48L49	672.	12.67	114.	30.	10.	5.09
+ HYDROGRAPH AT	L49	158.	12.75	34.	9.	3.	.47
+ HYDROGRAPH AT	DL432	23.	12.42	2.	1.	0.	1.99
+ ROUTED TO	L43L49	10.	14.08	2.	1.	0.	1.99
+ 4 COMBINED AT	CPL49	2208.	12.83	743.	288.	100.	26.38
+ ROUTED TO	49DS15	2199.	12.92	737.	288.	100.	26.38
+ ROUTED TO	DS1554	2134.	13.00	735.	288.	100.	26.38
HYDROGRAPH AT							

+	L54	191.	12.75	41.	11.	4.	.48
+ HYDROGRAPH AT	DL482	10.	12.50	1.	0.	0.	5.09
+ ROUTED TO	L48L54	5.	14.75	1.	0.	0.	5.09
+ 3 COMBINED AT	CPL54	2276.	13.00	765.	296.	103.	26.86
+ ROUTED TO	L54W2E	2274.	13.00	765.	296.	103.	26.86
+ ROUTED TO	W2EB46	2212.	13.08	763.	296.	103.	26.86
+ HYDROGRAPH AT	B46	216.	12.75	46.	12.	4.	.54
+ HYDROGRAPH AT	DB441	30.	12.75	10.	3.	1.	1.29
+ ROUTED TO	B44B46	29.	13.17	10.	3.	1.	1.29
+ 3 COMBINED AT	CPB46	2371.	13.08	799.	304.	106.	28.69
+ ROUTED TO	B46B47	2330.	13.17	797.	304.	106.	28.69
+ HYDROGRAPH AT	B47	200.	12.75	44.	12.	4.	.50
+ HYDROGRAPH AT	DB442	19.	12.75	6.	2.	1.	1.29
+ ROUTED TO	B44B47	17.	14.75	6.	2.	1.	1.29
+ 4 COMBINED AT	CPB47	2656.	13.17	1071.	378.	131.	31.95
+ HYDROGRAPH AT	B48	164.	12.67	31.	8.	3.	.40
+ 2 COMBINED AT	CPB48	2737.	13.17	1092.	384.	133.	32.34
+ ROUTED TO	SRB48	1513.	14.33	1047.	383.	133.	32.34
+ ROUTED TO	B48B54	1509.	14.58	1043.	383.	133.	32.34
+ HYDROGRAPH AT	B42	615.	12.08	48.	15.	5.	.35
+ ROUTED TO	B42B53	170.	14.58	48.	15.	5.	.35
+ HYDROGRAPH AT	B53	860.	12.67	143.	43.	14.	1.10
+ 2 COMBINED AT	CPB53	862.	12.67	185.	56.	19.	1.45
+ ROUTED TO	B53B54	739.	12.83	185.	56.	19.	1.45
+ HYDROGRAPH AT	B49	639.	12.08	45.	14.	5.	.32
+ ROUTED TO	B49B50	348.	12.42	45.	14.	5.	.32
+ HYDROGRAPH AT	B50	1241.	12.17	103.	31.	10.	.71
+ HYDROGRAPH AT	LR02SD	0.	.00	0.	0.	0.	.86
+ ROUTED TO	B02B50	0.	.00	0.	0.	0.	.86
+ 3 COMBINED AT	CPB50	1332.	12.17	147.	45.	15.	1.89
+ ROUTED TO	B50B51	1299.	12.17	147.	45.	15.	1.89
+ HYDROGRAPH AT	B51	1014.	12.17	89.	27.	9.	.61
+ 2 COMBINED AT	CPB51	2307.	12.17	235.	71.	24.	2.50
+ ROUTED TO	B51B52	1922.	12.33	235.	71.	24.	2.50
+ HYDROGRAPH AT	B52	1094.	12.25	88.	23.	8.	.84
+ 2 COMBINED AT	CPB52	2925.	12.33	322.	94.	32.	3.34
+ ROUTED TO	B52B54	2411.	12.50	322.	94.	32.	3.34
+ HYDROGRAPH AT	B54	1487.	12.25	129.	36.	12.	1.23
+ DIVERSION TO	RB54	153.	11.83	15.	5.	2.	1.23
+ HYDROGRAPH AT	DB54RE	1487.	12.25	121.	31.	10.	1.23
4 COMBINED AT							

+	CPB54	2867.	12.42	1470.	525.	183.	38.36
+ ROUTED TO	B54B57	2671.	12.67	1456.	525.	183.	38.36
+ HYDROGRAPH AT	B55	199.	12.83	43.	11.	4.	.53
+ ROUTED TO	B55B56	184.	13.17	43.	11.	4.	.53
+ HYDROGRAPH AT	B56	416.	13.50	123.	35.	12.	1.14
+ DIVERSION TO	RB56	416.	13.50	88.	23.	8.	1.14
+ HYDROGRAPH AT	DB56RE	269.	14.08	43.	12.	4.	1.14
+ 2 COMBINED AT	CPB56	346.	14.08	84.	23.	8.	1.67
+ ROUTED TO	B56B57	301.	14.25	84.	23.	8.	1.67
+ HYDROGRAPH AT	B57	1347.	12.33	147.	43.	14.	1.12
+ DIVERSION TO	RB57	1347.	12.33	147.	41.	14.	1.12
+ HYDROGRAPH AT	DB57RE	10.	17.58	7.	2.	1.	1.12
+ 3 COMBINED AT	CPB57	2671.	12.67	1511.	541.	188.	41.14
+ ROUTED TO	B57B58	2481.	12.92	1492.	537.	187.	41.14
+ HYDROGRAPH AT	B58	1416.	12.33	172.	52.	17.	1.20
+ DIVERSION TO	RB58	1416.	12.33	102.	28.	9.	1.20
+ HYDROGRAPH AT	DB58RE	1146.	12.50	85.	24.	8.	1.20
+ 2 COMBINED AT	CPB58	2684.	12.83	1545.	553.	192.	42.34
+ ROUTED TO	B58B59	2567.	13.00	1529.	553.	192.	42.34
+ HYDROGRAPH AT	B59	364.	13.08	77.	21.	7.	.70
+ DIVERSION TO	RB59	201.	12.58	19.	5.	2.	.70
+ HYDROGRAPH AT	DB59RE	364.	13.08	62.	16.	5.	.70
+ 2 COMBINED AT	CPB59	2863.	13.00	1576.	565.	196.	43.04
+ HYDROGRAPH AT	B64	150.	12.75	24.	7.	2.	.23
+ DIVERSION TO	RB64	68.	12.25	5.	1.	0.	.23
+ HYDROGRAPH AT	DB64RE	150.	12.75	20.	5.	2.	.23
+ ROUTED TO	B64B65	115.	13.25	20.	5.	2.	.23
+ HYDROGRAPH AT	B65	226.	12.33	25.	7.	2.	.23
+ DIVERSION TO	DB65	113.	12.33	12.	4.	1.	.23
+ HYDROGRAPH AT	DB65	113.	12.33	12.	4.	1.	.23
+ 3 COMBINED AT	CPB65A	2883.	13.00	1592.	571.	198.	43.50
+ DIVERSION TO	DB65E	1021.	13.00	184.	46.	15.	43.50
+ HYDROGRAPH AT	DB65BN	1862.	13.00	1408.	525.	183.	43.50
+ ROUTED TO	B6565B	1860.	13.08	1405.	525.	183.	43.50
+ HYDROGRAPH AT	B61	880.	12.50	132.	40.	13.	.96
+ DIVERSION TO	RB61	880.	12.50	128.	34.	11.	.96
+ HYDROGRAPH AT	DB61RE	42.	13.75	16.	6.	2.	.96
+ ROUTED TO	B61B62	31.	14.42	15.	6.	2.	.96
+ HYDROGRAPH AT	B62	423.	12.42	56.	16.	5.	.43
+ DIVERSION TO	RB62	423.	12.42	53.	14.	5.	.43
HYDROGRAPH AT							

+		DB62RE	32.	13.25	7.	2.	1.	.43
+	2 COMBINED AT	CPB62	39.	14.42	21.	8.	3.	1.39
+	ROUTED TO	B62B63	37.	14.83	21.	8.	3.	1.39
+	HYDROGRAPH AT	B63	112.	12.33	12.	3.	1.	.12
+	2 COMBINED AT	CPB63	111.	12.33	29.	11.	4.	1.51
+	ROUTED TO	SRB63	110.	12.33	29.	11.	4.	1.51
+	ROUTED TO	B63B65	99.	12.50	28.	11.	4.	1.51
+	HYDROGRAPH AT	DB65	113.	12.33	12.	4.	1.	.23
+	3 COMBINED AT	CPB65B	1885.	13.08	1409.	529.	185.	45.02
+	ROUTED TO	B65B66	1840.	13.33	1401.	529.	185.	45.02
+	HYDROGRAPH AT	S01	344.	12.33	45.	15.	5.	.27
+	DIVERSION TO	RS01	344.	12.33	45.	14.	5.	.27
+	HYDROGRAPH AT	DS01RE	4.	18.83	3.	1.	0.	.27
+	DIVERSION TO	DS011S	2.	18.83	2.	1.	0.	.27
+	HYDROGRAPH AT	DS011	2.	18.83	2.	0.	0.	.27
+	DIVERSION TO	DS012S	1.	18.83	0.	0.	0.	.27
+	HYDROGRAPH AT	DS012	1.	18.83	1.	0.	0.	.27
+	ROUTED TO	S01B66	1.	19.58	1.	0.	0.	.27
+	HYDROGRAPH AT	B66	409.	12.67	84.	24.	8.	.76
+	DIVERSION TO	RB66	326.	12.42	24.	7.	2.	.76
+	HYDROGRAPH AT	DB66RE	409.	12.67	66.	17.	6.	.76
+	3 COMBINED AT	CPB66	1996.	13.25	1435.	542.	189.	46.04
+	ROUTED TO	B66B68	1953.	13.58	1430.	542.	189.	46.04
+	HYDROGRAPH AT	DS011	2.	18.83	2.	1.	0.	.27
+	ROUTED TO	S01S02	2.	20.50	2.	1.	0.	.27
+	HYDROGRAPH AT	S02	294.	12.75	64.	18.	6.	.61
+	DIVERSION TO	RS02	294.	12.75	40.	11.	4.	.61
+	HYDROGRAPH AT	DS02RE	225.	13.08	28.	8.	3.	.61
+	2 COMBINED AT	CPS02	225.	13.08	28.	8.	3.	.87
+	DIVERSION TO	DS021S	95.	13.08	10.	3.	1.	.87
+	HYDROGRAPH AT	DS021	130.	13.08	18.	5.	2.	.87
+	DIVERSION TO	DS022S	48.	13.08	8.	2.	1.	.87
+	HYDROGRAPH AT	DS022	82.	13.08	11.	3.	1.	.87
+	ROUTED TO	S02B67	70.	13.25	10.	3.	1.	.87
+	HYDROGRAPH AT	B67	282.	12.50	41.	12.	4.	.33
+	DIVERSION TO	RB67	282.	12.50	24.	6.	2.	.33
+	HYDROGRAPH AT	DB67RE	241.	12.67	21.	6.	2.	.33
+	HYDROGRAPH AT	DS012	1.	18.83	0.	0.	0.	.27
+	ROUTED TO	S01B67	1.	24.75	0.	0.	0.	.27
+	3 COMBINED AT	CPB67	241.	12.67	31.	9.	3.	1.20
	ROUTED TO							

+	B67B68	217.	12.75	31.	9.	3.	1.20
+ HYDROGRAPH AT	B68	340.	12.75	73.	19.	6.	.74
+ DIVERSION TO	RB68	309.	12.58	25.	6.	2.	.74
+ HYDROGRAPH AT	DB68RE	340.	12.75	51.	13.	4.	.74
+ 3 COMBINED AT	CPB68	2101.	13.58	1469.	555.	193.	47.72
+ ROUTED TO	B68B69	2046.	13.75	1462.	555.	193.	47.72
+ HYDROGRAPH AT	B69	366.	12.83	82.	21.	7.	.91
+ HYDROGRAPH AT	DS022	48.	13.08	8.	2.	1.	.87
+ ROUTED TO	S02B69	24.	15.08	7.	2.	1.	.87
+ 3 COMBINED AT	CPB69	2141.	13.75	1490.	571.	199.	48.62
+ ROUTED TO	B69B70	2105.	13.92	1487.	571.	199.	48.62
+ HYDROGRAPH AT	B85	386.	12.50	58.	17.	6.	.41
+ DIVERSION TO	RB85	253.	12.25	21.	6.	2.	.41
+ HYDROGRAPH AT	DB85RE	386.	12.50	42.	11.	4.	.41
+ ROUTED TO	B85B86	312.	12.83	41.	11.	4.	.41
+ HYDROGRAPH AT	B86	611.	12.50	90.	28.	9.	.62
+ DIVERSION TO	RB86	8.	6.67	6.	1.	0.	.62
+ HYDROGRAPH AT	DB86RE	611.	12.50	90.	26.	9.	.62
+ 2 COMBINED AT	CPB86	635.	12.75	128.	37.	12.	1.03
+ ROUTED TO	B86B89	595.	12.83	128.	37.	12.	1.03
+ HYDROGRAPH AT	B87	477.	12.17	47.	15.	5.	.27
+ DIVERSION TO	RB87	75.	11.83	11.	4.	1.	.27
+ HYDROGRAPH AT	DB87RE	477.	12.17	42.	12.	4.	.27
+ ROUTED TO	B87B88	280.	12.67	40.	12.	4.	.27
+ HYDROGRAPH AT	B88	556.	12.42	81.	25.	8.	.51
+ DIVERSION TO	RB88	22.	11.08	11.	4.	1.	.51
+ HYDROGRAPH AT	DB88RE	556.	12.42	79.	22.	7.	.51
+ 2 COMBINED AT	CPB88	714.	12.50	117.	33.	11.	.78
+ ROUTED TO	B88B89	636.	12.75	116.	33.	11.	.78
+ HYDROGRAPH AT	B89	531.	12.25	57.	18.	6.	.38
+ DIVERSION TO	RB89	3.	1.25	2.	1.	0.	.38
+ HYDROGRAPH AT	DB89RE	531.	12.25	57.	17.	6.	.38
+ 3 COMBINED AT	CPB89	1268.	12.75	296.	87.	29.	2.19
+ ROUTED TO	SRB89	374.	13.58	291.	87.	29.	2.19
+ DIVERSION TO	DB89SD	374.	13.58	291.	87.	29.	2.19
+ HYDROGRAPH AT	DB89SW	0.	.00	0.	0.	0.	2.19
+ ROUTED TO	B89B92	0.	.00	0.	0.	0.	2.19
+ HYDROGRAPH AT	B90	264.	12.50	41.	11.	4.	.46
+ DIVERSION TO	RB90	4.	11.50	2.	1.	0.	.46
+ HYDROGRAPH AT	DB90RE	264.	12.50	41.	11.	4.	.46
ROUTED TO							

+	B90B91	196.	13.50	40.	11.	4.	.46
+ HYDROGRAPH AT	B91	207.	12.83	48.	13.	4.	.59
+ DIVERSION TO	RB91	122.	12.42	7.	2.	1.	.59
+ HYDROGRAPH AT	DB91RE	207.	12.83	43.	11.	4.	.59
+ 2 COMBINED AT	CPB91	321.	13.33	82.	21.	7.	1.04
+ ROUTED TO	B91B92	277.	14.17	80.	21.	7.	1.04
+ HYDROGRAPH AT	B92	2016.	12.25	192.	58.	19.	1.37
+ 3 COMBINED AT	CPB92	2009.	12.25	261.	79.	26.	4.60
+ ROUTED TO	B92B70	2019.	12.25	261.	79.	26.	4.60
+ HYDROGRAPH AT	B70	87.	12.42	13.	4.	1.	.11
+ 3 COMBINED AT	CPB70	2275.	13.92	1563.	626.	221.	53.33
+ ROUTED TO	B70B93	2274.	14.00	1563.	626.	221.	53.33
+ HYDROGRAPH AT	B93	151.	13.00	47.	14.	5.	.42
+ DIVERSION TO	RB93	2.	4.50	1.	0.	0.	.42
+ HYDROGRAPH AT	DB93RE	151.	13.00	47.	14.	5.	.42
+ 2 COMBINED AT	CPB93	2330.	14.00	1582.	637.	224.	53.76
+ ROUTED TO	B93B94	2304.	14.08	1579.	636.	224.	53.76
+ HYDROGRAPH AT	B94	186.	12.83	40.	10.	3.	.51
+ 2 COMBINED AT	CPB94	2327.	14.08	1586.	644.	227.	54.26
+ 2 COMBINED AT	DUMMY	13997.	12.50	4893.	1766.	629.	143.03
+ HYDROGRAPH AT	B101	76.	12.25	8.	2.	1.	.08
+ ROUTED TO	SRB101	50.	12.50	8.	2.	1.	.08
+ ROUTED TO	B101S	42.	12.92	8.	2.	1.	.08
+ HYDROGRAPH AT	S06	532.	12.25	48.	14.	5.	.39
+ DIVERSION TO	RS06	532.	12.25	48.	14.	5.	.39
+ HYDROGRAPH AT	DS06RE	0.	.00	0.	0.	0.	.39
+ 2 COMBINED AT	CPS06	42.	12.92	8.	2.	1.	.47
+ ROUTED TO	S06S07	33.	13.67	8.	2.	1.	.47
+ HYDROGRAPH AT	S07	531.	12.33	61.	19.	6.	.42
+ DIVERSION TO	RS07	531.	12.33	61.	19.	6.	.42
+ HYDROGRAPH AT	DS07RE	1.	21.58	0.	0.	0.	.42
+ 2 COMBINED AT	CPS07	33.	13.67	8.	2.	1.	.89
+ ROUTED TO	S07S08	29.	14.25	8.	2.	1.	.89
+ HYDROGRAPH AT	S08	372.	12.25	38.	12.	4.	.27
+ DIVERSION TO	RS08	372.	12.25	38.	12.	4.	.27
+ HYDROGRAPH AT	DS08RE	0.	.00	0.	0.	0.	.27
+ 2 COMBINED AT	CPS08	29.	14.25	8.	2.	1.	1.16
+ ROUTED TO	S08S09	27.	14.58	8.	2.	1.	1.16
+ HYDROGRAPH AT	S09	515.	12.25	47.	14.	5.	.37
+ DIVERSION TO	RS09	515.	12.25	42.	11.	4.	.37
HYDROGRAPH AT							

+		DS09RE	84.	12.58	9.	3.	1.	.37
+	2 COMBINED AT	CPS09	84.	12.58	16.	5.	2.	1.53
+	ROUTED TO	SRS09	0.	.00	0.	0.	0.	1.53
+	DIVERSION TO	DS091W	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+	DIVERSION TO	DS092W	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+	ROUTED TO	S09S23	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	S21	44.	12.75	9.	2.	1.	.13
+	DIVERSION TO	DS21S	22.	12.75	5.	1.	0.	.13
+	HYDROGRAPH AT	DS21SE	22.	12.75	5.	1.	0.	.13
+	ROUTED TO	S21S23	16.	14.50	4.	1.	0.	.13
+	HYDROGRAPH AT	S22	304.	12.33	28.	7.	2.	.27
+	DIVERSION TO	RS22	304.	12.33	23.	6.	2.	.27
+	HYDROGRAPH AT	DS22RE	114.	12.58	5.	1.	0.	.27
+	ROUTED TO	S22S23	27.	13.92	5.	1.	0.	.27
+	HYDROGRAPH AT	S23	590.	12.50	89.	23.	8.	1.03
+	DIVERSION TO	RS23	590.	12.50	89.	23.	8.	1.03
+	HYDROGRAPH AT	DS23RE	0.	.00	0.	0.	0.	1.03
+	4 COMBINED AT	CPS23	29.	14.42	9.	2.	1.	2.95
+	ROUTED TO	SRS23	29.	14.42	9.	2.	1.	2.95
+	ROUTED TO	S23S24	26.	15.17	9.	2.	1.	2.95
+	HYDROGRAPH AT	S24	185.	12.67	35.	9.	3.	.42
+	HYDROGRAPH AT	S03	607.	12.58	104.	32.	11.	.72
+	DIVERSION TO	RS03	607.	12.58	102.	28.	9.	.72
+	HYDROGRAPH AT	DS03RE	22.	14.50	11.	4.	1.	.72
+	HYDROGRAPH AT	DS021	95.	13.08	10.	3.	1.	.87
+	ROUTED TO	S02S03	68.	13.50	10.	3.	1.	.87
+	2 COMBINED AT	CPS03	68.	13.50	20.	7.	2.	1.59
+	ROUTED TO	S03S04	42.	14.75	18.	7.	2.	1.59
+	HYDROGRAPH AT	S04	435.	12.58	81.	24.	8.	.70
+	DIVERSION TO	RS04	435.	12.58	50.	13.	4.	.70
+	HYDROGRAPH AT	DS04RE	342.	12.83	37.	10.	3.	.70
+	2 COMBINED AT	CPS04	341.	12.83	51.	17.	6.	2.30
+	ROUTED TO	SRS04	168.	13.17	51.	17.	6.	2.30
+	ROUTED TO	S04S10	139.	14.25	47.	17.	6.	2.30
+	HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+	ROUTED TO	S09S10	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	S05	83.	12.83	19.	5.	2.	.21
+	ROUTED TO	S05S10	63.	14.33	18.	5.	2.	.21
	HYDROGRAPH AT							

+	S10	184.	13.00	53.	14.	5.	.62
+ 4 COMBINED AT	CPS10	263.	14.25	110.	35.	12.	4.65
+ ROUTED TO	S10S24	236.	14.83	109.	35.	12.	4.65
+ HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+ ROUTED TO	S09S24	0.	.00	0.	0.	0.	1.53
+ 4 COMBINED AT	CPS24	242.	14.92	141.	45.	15.	6.49
+ ROUTED TO	S24S25	220.	16.00	137.	45.	15.	6.49
+ HYDROGRAPH AT	W21	241.	12.25	18.	4.	1.	.22
+ ROUTED TO	W21L50	152.	12.67	18.	4.	1.	.22
+ HYDROGRAPH AT	L50	511.	12.25	38.	10.	3.	.50
+ 2 COMBINED AT	CPL50	514.	12.25	56.	14.	5.	.72
+ ROUTED TO	L50L51	426.	12.42	56.	14.	5.	.72
+ HYDROGRAPH AT	L51	538.	12.33	51.	15.	5.	.50
+ DIVERSION TO	RL51	538.	12.33	36.	9.	3.	.50
+ HYDROGRAPH AT	DL51RE	326.	12.50	18.	5.	2.	.50
+ HYDROGRAPH AT	DL461	122.	12.50	33.	9.	3.	1.85
+ ROUTED TO	L46L51	118.	12.83	33.	9.	3.	1.85
+ 3 COMBINED AT	CPL51	829.	12.50	106.	28.	9.	3.07
+ ROUTED TO	L51L52	657.	12.58	106.	28.	9.	3.07
+ HYDROGRAPH AT	L52	488.	12.42	55.	16.	5.	.50
+ DIVERSION TO	RL52	488.	12.42	44.	12.	4.	.50
+ HYDROGRAPH AT	DL52RE	206.	12.67	15.	4.	1.	.50
+ HYDROGRAPH AT	DL462	90.	12.50	12.	3.	1.	1.85
+ ROUTED TO	L46L52	73.	13.00	12.	3.	1.	1.85
+ HYDROGRAPH AT	DL471	185.	12.25	45.	12.	4.	3.09
+ ROUTED TO	L47L52	186.	12.67	45.	12.	4.	3.09
+ 4 COMBINED AT	CPL52	1059.	12.67	177.	47.	16.	4.80
+ DIVERSION TO	DL521S	241.	12.67	28.	7.	2.	4.80
+ HYDROGRAPH AT	DL521	819.	12.67	149.	40.	13.	4.80
+ DIVERSION TO	DL522S	43.	12.67	7.	2.	1.	4.80
+ HYDROGRAPH AT	DL522	776.	12.67	142.	38.	13.	4.80
+ ROUTED TO	L52L53	638.	12.92	141.	38.	13.	4.80
+ HYDROGRAPH AT	L53	270.	12.92	68.	17.	6.	1.00
+ HYDROGRAPH AT	DL472	1063.	12.67	125.	32.	11.	3.09
+ ROUTED TO	L47L53	774.	13.33	125.	32.	11.	3.09
+ HYDROGRAPH AT	DL481	7.	12.50	0.	0.	0.	5.09
+ ROUTED TO	L48L53	2.	15.08	0.	0.	0.	5.09
+ 4 COMBINED AT	CPL53	1460.	13.25	321.	84.	28.	7.80
+ DIVERSION TO	DL531S	454.	13.25	70.	18.	6.	7.80
+ HYDROGRAPH AT	DL531	1007.	13.25	251.	66.	22.	7.80
DIVERSION TO							

+		DL532S	49.	13.25	8.	2.	1.	7.80
+	HYDROGRAPH AT	DL532	958.	13.25	243.	64.	21.	7.80
+	ROUTED TO	L53L54	925.	13.33	243.	64.	21.	7.80
+	ROUTED TO	SRL54	400.	14.25	231.	64.	21.	7.80
+	ROUTED TO	L54L58	399.	14.42	230.	64.	21.	7.80
+	HYDROGRAPH AT	L55	220.	12.83	35.	9.	3.	.50
+	DIVERSION TO	DL551S	7.	12.83	0.	0.	0.	.50
+	HYDROGRAPH AT	DL551	213.	12.83	34.	9.	3.	.50
+	DIVERSION TO	DL552S	10.	12.83	2.	0.	0.	.50
+	HYDROGRAPH AT	DL552	203.	12.83	33.	8.	3.	.50
+	ROUTED TO	L55L56	185.	13.08	33.	8.	3.	.50
+	HYDROGRAPH AT	L56	940.	12.33	74.	19.	6.	1.00
+	DIVERSION TO	RL56	940.	12.33	74.	19.	6.	1.00
+	HYDROGRAPH AT	DL56RE	0.	.00	0.	0.	0.	1.00
+	HYDROGRAPH AT	DL521	241.	12.67	28.	7.	2.	4.80
+	ROUTED TO	L52L56	181.	12.92	28.	7.	2.	4.80
+	3 COMBINED AT	CPL56	345.	13.00	59.	15.	5.	6.30
+	DIVERSION TO	DL561S	96.	13.00	12.	3.	1.	6.30
+	HYDROGRAPH AT	DL561	249.	13.00	47.	12.	4.	6.30
+	DIVERSION TO	DL562S	6.	13.00	1.	0.	0.	6.30
+	HYDROGRAPH AT	DL562	243.	13.00	46.	12.	4.	6.30
+	ROUTED TO	L56L57	227.	13.25	46.	12.	4.	6.30
+	HYDROGRAPH AT	L57	276.	13.00	70.	18.	6.	1.00
+	HYDROGRAPH AT	DL522	43.	12.67	7.	2.	1.	4.80
+	ROUTED TO	L52L57	25.	14.58	7.	2.	1.	4.80
+	HYDROGRAPH AT	DL531	454.	13.25	70.	18.	6.	7.80
+	ROUTED TO	L53L57	419.	13.50	70.	18.	6.	7.80
+	4 COMBINED AT	CPL57	790.	13.42	183.	47.	16.	10.30
+	DIVERSION TO	DL571S	114.	13.42	21.	5.	2.	10.30
+	HYDROGRAPH AT	DL571	676.	13.42	163.	42.	14.	10.30
+	DIVERSION TO	DL572S	26.	13.42	7.	2.	1.	10.30
+	HYDROGRAPH AT	DL572	650.	13.42	156.	40.	13.	10.30
+	ROUTED TO	L57L58	634.	13.50	155.	40.	13.	10.30
+	HYDROGRAPH AT	L58	168.	12.83	38.	10.	3.	.44
+	HYDROGRAPH AT	DL532	49.	13.25	8.	2.	1.	7.80
+	ROUTED TO	L53L58	35.	14.58	8.	2.	1.	7.80
+	4 COMBINED AT	CPL58	967.	13.58	414.	113.	38.	10.74
+	ROUTED TO	L58L63	966.	13.58	414.	113.	38.	10.74
+	HYDROGRAPH AT	L63	65.	12.42	8.	2.	1.	.09
+	HYDROGRAPH AT	DL572	26.	13.42	7.	2.	1.	10.30
	ROUTED TO							

+	L57L63	24.	13.92	7.	2.	1.	10.30
+ 3 COMBINED AT	CPL63	986.	13.58	426.	117.	39.	10.83
+ ROUTED TO	L63L64	980.	13.67	425.	117.	39.	10.83
+ HYDROGRAPH AT	L64	96.	12.58	19.	5.	2.	.20
+ 2 COMBINED AT	CPL64	994.	13.67	440.	122.	41.	11.02
+ ROUTED TO	L64L67	984.	13.75	439.	122.	41.	11.02
+ HYDROGRAPH AT	L67	48.	12.75	11.	3.	1.	.10
+ 2 COMBINED AT	CPL67	994.	13.75	448.	125.	42.	11.13
+ ROUTED TO	L67L68	993.	13.75	448.	125.	42.	11.13
+ HYDROGRAPH AT	L60	259.	13.00	63.	16.	5.	1.00
+ HYDROGRAPH AT	DL552	10.	12.83	2.	0.	0.	.50
+ ROUTED TO	L55L60	6.	15.25	2.	0.	0.	.50
+ HYDROGRAPH AT	DL561	96.	13.00	12.	3.	1.	6.30
+ ROUTED TO	L56L60	62.	14.00	12.	3.	1.	6.30
+ 3 COMBINED AT	CPL60	259.	13.00	76.	19.	6.	7.30
+ DIVERSION TO	DL601S	124.	13.00	38.	9.	3.	7.30
+ HYDROGRAPH AT	DL601	126.	13.00	36.	9.	3.	7.30
+ DIVERSION TO	DL602S	19.	13.00	7.	2.	1.	7.30
+ HYDROGRAPH AT	DL602	107.	13.00	29.	7.	2.	7.30
+ ROUTED TO	L60L61	97.	13.50	29.	7.	2.	7.30
+ HYDROGRAPH AT	L61	154.	12.83	34.	8.	3.	.51
+ HYDROGRAPH AT	DL562	6.	13.00	1.	0.	0.	6.30
+ ROUTED TO	L56L61	4.	15.42	1.	0.	0.	6.30
+ 3 COMBINED AT	CPL61	193.	13.33	62.	16.	5.	7.81
+ DIVERSION TO	DL61S	126.	13.33	40.	10.	3.	7.81
+ HYDROGRAPH AT	DL61SE	68.	13.33	22.	5.	2.	7.81
+ ROUTED TO	L61L62	62.	13.75	21.	5.	2.	7.81
+ HYDROGRAPH AT	L62	164.	12.83	35.	9.	3.	.49
+ HYDROGRAPH AT	DL571	114.	13.42	21.	5.	2.	10.30
+ ROUTED TO	L57L62	102.	13.83	20.	5.	2.	10.30
+ 3 COMBINED AT	CPL62	206.	13.75	72.	18.	6.	12.30
+ ROUTED TO	L62L68	197.	14.00	72.	18.	6.	12.30
+ HYDROGRAPH AT	DL602	19.	13.00	7.	2.	1.	7.30
+ ROUTED TO	L60L68	15.	15.92	6.	2.	1.	7.30
+ HYDROGRAPH AT	DL61SE	126.	13.33	40.	10.	3.	7.81
+ ROUTED TO	L61L68	119.	13.58	40.	10.	3.	7.81
+ HYDROGRAPH AT	L68	640.	12.50	108.	32.	11.	1.00
+ 5 COMBINED AT	CPL68	1306.	13.75	644.	181.	61.	14.13
+ HYDROGRAPH AT	W28	420.	12.17	28.	7.	2.	.35
+ DIVERSION TO	RW28	420.	12.17	15.	4.	1.	.35
HYDROGRAPH AT							

+	DW28RE	322.	12.25	13.	3.	1.	.35
+ ROUTED TO	W28W29	106.	13.17	13.	3.	1.	.35
+ HYDROGRAPH AT	W29	552.	12.33	51.	13.	4.	.64
+ DIVERSION TO	RW29	522.	12.25	22.	5.	2.	.64
+ HYDROGRAPH AT	DW29RE	489.	12.42	30.	8.	3.	.64
+ 2 COMBINED AT	CPW29	489.	12.42	43.	11.	4.	.99
+ ROUTED TO	W29W30	372.	12.50	43.	11.	4.	.99
+ HYDROGRAPH AT	W30	340.	12.25	25.	7.	2.	.27
+ 2 COMBINED AT	CPW30	463.	12.50	68.	17.	6.	1.26
+ ROUTED TO	W30L59	398.	12.58	68.	17.	6.	1.26
+ HYDROGRAPH AT	L59	492.	12.33	48.	13.	4.	.50
+ DIVERSION TO	RL59	492.	12.33	48.	13.	4.	.50
+ HYDROGRAPH AT	DL59RE	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DL551	7.	12.83	0.	0.	0.	.50
+ ROUTED TO	L55L59	2.	13.92	0.	0.	0.	.50
+ 3 COMBINED AT	CPL59	398.	12.58	68.	17.	6.	2.26
+ ROUTED TO	L59L65	343.	12.83	67.	17.	6.	2.26
+ HYDROGRAPH AT	W31	284.	12.25	22.	6.	2.	.23
+ ROUTED TO	W31W32	191.	12.50	22.	6.	2.	.23
+ HYDROGRAPH AT	W32	385.	12.50	60.	17.	6.	.61
+ 2 COMBINED AT	CPW32	575.	12.50	81.	22.	7.	.85
+ ROUTED TO	W32L65	558.	12.58	81.	22.	7.	.85
+ HYDROGRAPH AT	L65	227.	12.67	43.	12.	4.	.55
+ 3 COMBINED AT	CPL65	1048.	12.67	190.	51.	17.	3.65
+ ROUTED TO	L65L69	1031.	12.75	190.	51.	17.	3.65
+ HYDROGRAPH AT	L69	123.	12.08	11.	4.	1.	.06
+ 2 COMBINED AT	CPL69	1038.	12.75	200.	54.	18.	3.70
+ ROUTED TO	L69L70	1029.	12.75	200.	54.	18.	3.70
+ HYDROGRAPH AT	L70	104.	12.08	9.	3.	1.	.05
+ 2 COMBINED AT	CPL70	1034.	12.75	209.	57.	19.	3.75
+ ROUTED TO	L70L71	1034.	12.75	209.	57.	19.	3.75
+ HYDROGRAPH AT	L66	276.	13.00	77.	20.	7.	1.00
+ HYDROGRAPH AT	DL601	124.	13.00	38.	9.	3.	7.30
+ ROUTED TO	L60L66	111.	13.75	37.	9.	3.	7.30
+ 2 COMBINED AT	CPL66	311.	13.50	110.	29.	10.	8.30
+ ROUTED TO	L66L71	308.	13.58	110.	29.	10.	8.30
+ HYDROGRAPH AT	L71	206.	12.08	19.	6.	2.	.11
+ DIVERSION TO	RL71	3.	8.75	2.	1.	0.	.11
+ HYDROGRAPH AT	DL71RE	206.	12.08	19.	5.	2.	.11
+ 3 COMBINED AT	CPL71	1179.	12.83	317.	87.	29.	11.66
HYDROGRAPH AT							

+		L72	412.	12.17	51.	18.	6.	.22
+	DIVERSION TO	RL72	11.	8.58	7.	2.	1.	.22
+	HYDROGRAPH AT	DL72RE	412.	12.17	51.	15.	5.	.22
+	3 COMBINED AT	CPL72	2078.	12.83	972.	274.	92.	18.71
+	ROUTED TO	SRL72	383.	16.42	369.	234.	92.	18.71
+	ROUTED TO	L72RID	383.	16.42	369.	234.	92.	18.71
+	ROUTED TO	RIDS13	383.	16.58	369.	234.	92.	18.71
+	HYDROGRAPH AT	S12	344.	12.08	27.	8.	3.	.20
+	ROUTED TO	SRS12	346.	12.17	22.	6.	2.	.20
+	ROUTED TO	S12S13	236.	12.33	22.	6.	2.	.20
+	HYDROGRAPH AT	S13	406.	12.25	35.	10.	3.	.31
+	DIVERSION TO	RS13	87.	11.92	6.	2.	1.	.31
+	HYDROGRAPH AT	DS13RE	406.	12.25	31.	8.	3.	.31
+	3 COMBINED AT	CPS13	599.	12.33	373.	246.	96.	19.22
+	DIVERSION TO	DS13S	353.	12.33	145.	58.	19.	19.22
+	HYDROGRAPH AT	DS13SE	246.	12.33	228.	188.	77.	19.22
+	ROUTED TO	S13S19	236.	12.42	228.	188.	77.	19.22
+	HYDROGRAPH AT	S19	423.	12.83	74.	20.	7.	.81
+	DIVERSION TO	RS19	423.	12.83	74.	20.	7.	.81
+	HYDROGRAPH AT	DS19RE	0.	.00	0.	0.	0.	.81
+	2 COMBINED AT	CPS19	236.	12.42	228.	188.	77.	20.02
+	ROUTED TO	S19S20	230.	16.75	228.	187.	77.	20.02
+	HYDROGRAPH AT	B95	70.	12.25	6.	2.	1.	.08
+	ROUTED TO	B95B96	21.	15.17	6.	2.	1.	.08
+	HYDROGRAPH AT	B96	354.	12.58	68.	19.	6.	.69
+	DIVERSION TO	RB96	61.	12.08	6.	2.	1.	.69
+	HYDROGRAPH AT	DB96RE	354.	12.58	65.	17.	6.	.69
+	2 COMBINED AT	CPB96	354.	12.58	71.	19.	6.	.77
+	ROUTED TO	B96B97	311.	13.17	69.	19.	6.	.77
+	HYDROGRAPH AT	B97	1003.	12.42	124.	37.	12.	.93
+	2 COMBINED AT	CPB97	1001.	12.42	187.	55.	19.	1.70
+	DIVERSION TO	RB97	1001.	12.42	179.	47.	16.	1.70
+	HYDROGRAPH AT	DB97RE	56.	14.92	26.	8.	3.	1.70
+	ROUTED TO	SRB97	7.	24.25	7.	6.	3.	1.70
+	DIVERSION TO	DD97S	7.	24.25	7.	6.	3.	1.70
+	HYDROGRAPH AT	DB97SE	0.	.00	0.	0.	0.	1.70
+	ROUTED TO	B97B99	0.	.00	0.	0.	0.	1.70
+	HYDROGRAPH AT	B99	118.	12.42	16.	5.	2.	.16
+	2 COMBINED AT	CPB99	117.	12.42	16.	5.	2.	1.86
+	ROUTED TO	B99S11	108.	12.50	16.	5.	2.	1.86
	HYDROGRAPH AT							

+		S11	52.	12.42	8.	3.	1.	.06
+	2 COMBINED AT	CPS11	157.	12.50	24.	7.	2.	1.92
+	ROUTED TO	SRS11	0.	.00	0.	0.	0.	1.92
+	ROUTED TO	S11S14	0.	.00	0.	0.	0.	1.92
+	HYDROGRAPH AT	S14	340.	12.42	43.	13.	4.	.36
+	DIVERSION TO	RS14	340.	12.42	38.	10.	3.	.36
+	HYDROGRAPH AT	DS14RE	78.	12.92	9.	3.	1.	.36
+	2 COMBINED AT	CPS14A	77.	12.92	8.	3.	1.	2.28
+	HYDROGRAPH AT	DS13SE	353.	12.33	145.	58.	19.	19.22
+	ROUTED TO	S13S14	323.	12.33	145.	58.	19.	19.22
+	2 COMBINED AT	CPS14B	315.	12.33	145.	57.	19.	21.50
+	ROUTED TO	S14S16	194.	12.67	145.	57.	19.	21.50
+	HYDROGRAPH AT	B98	425.	12.17	39.	12.	4.	.27
+	DIVERSION TO	RB98	425.	12.17	39.	12.	4.	.27
+	HYDROGRAPH AT	DB98RE	0.	.00	0.	0.	0.	.27
+	ROUTED TO	B98100	0.	.00	0.	0.	0.	.27
+	HYDROGRAPH AT	B100	141.	12.25	14.	4.	1.	.12
+	HYDROGRAPH AT	DB97SE	7.	24.25	7.	6.	3.	1.70
+	3 COMBINED AT	CPB100	141.	12.25	15.	9.	4.	2.09
+	ROUTED TO	B100S	106.	12.50	14.	8.	4.	2.09
+	HYDROGRAPH AT	S15	691.	12.25	64.	19.	6.	.48
+	DIVERSION TO	RS15	691.	12.25	47.	13.	4.	.48
+	HYDROGRAPH AT	DS15RE	345.	12.42	23.	7.	2.	.48
+	2 COMBINED AT	CPS15	439.	12.42	36.	15.	6.	2.57
+	ROUTED TO	S15S16	224.	12.83	35.	15.	6.	2.57
+	HYDROGRAPH AT	S16	595.	12.58	91.	27.	9.	.68
+	DIVERSION TO	RS16	595.	12.58	91.	27.	9.	.68
+	HYDROGRAPH AT	DS16RE	1.	21.75	0.	0.	0.	.68
+	3 COMBINED AT	CPS16	250.	12.83	151.	65.	22.	23.05
+	ROUTED TO	S16S18	215.	13.17	150.	65.	22.	23.05
+	HYDROGRAPH AT	S17	115.	12.75	24.	6.	2.	.26
+	ROUTED TO	S17S18	108.	13.08	24.	6.	2.	.26
+	HYDROGRAPH AT	S18	698.	12.50	92.	26.	9.	.74
+	DIVERSION TO	RS18	698.	12.50	92.	26.	9.	.74
+	HYDROGRAPH AT	DS18RE	0.	.00	0.	0.	0.	.74
+	3 COMBINED AT	CPS18	302.	13.17	156.	69.	24.	24.05
+	HYDROGRAPH AT	S20	461.	12.67	73.	21.	7.	.61
+	DIVERSION TO	RS20	461.	12.67	45.	12.	4.	.61
+	HYDROGRAPH AT	DS20RE	346.	12.83	33.	9.	3.	.61
+	3 COMBINED AT	CPS20	628.	13.00	396.	259.	101.	25.47
	ROUTED TO							

+		S20S26	618.	13.08	396.	259.	101.	25.47
+	HYDROGRAPH AT	S26	74.	12.67	14.	3.	1.	.19
+	2 COMBINED AT	CPS26	663.	13.08	401.	261.	102.	25.65
+	ROUTED TO	S26S31	652.	13.17	401.	261.	102.	25.65
+	HYDROGRAPH AT	S26A	178.	12.50	31.	9.	3.	.28
+	DIVERSION TO	RS26	178.	12.50	16.	4.	1.	.28
+	HYDROGRAPH AT	DS26RE	161.	12.67	17.	5.	2.	.28
+	HYDROGRAPH AT	DS21SE	22.	12.75	5.	1.	0.	.13
+	ROUTED TO	S2126A	18.	13.83	5.	1.	0.	.13
+	2 COMBINED AT	CPS26A	161.	12.67	22.	6.	2.	.40
+	DIVERSION TO	DS26S	0.	.00	0.	0.	0.	.40
+	HYDROGRAPH AT	DS26SE	161.	12.67	22.	6.	2.	.40
+	ROUTED TO	26A31A	76.	13.08	21.	6.	2.	.40
+	HYDROGRAPH AT	S28	237.	12.08	12.	3.	1.	.14
+	DIVERSION TO	RS28	237.	12.08	12.	3.	1.	.14
+	HYDROGRAPH AT	DS28RE	0.	.00	0.	0.	0.	.14
+	ROUTED TO	S28S29	0.	.00	0.	0.	0.	.14
+	HYDROGRAPH AT	S29	303.	12.67	56.	15.	5.	.62
+	2 COMBINED AT	CPS29	303.	12.67	56.	15.	5.	.76
+	ROUTED TO	S29S30	280.	12.92	56.	15.	5.	.76
+	HYDROGRAPH AT	S30	167.	12.83	36.	9.	3.	.47
+	2 COMBINED AT	CPS30	441.	12.83	91.	24.	8.	1.22
+	ROUTED TO	S30S32	423.	13.08	91.	24.	8.	1.22
+	HYDROGRAPH AT	S32	68.	12.67	13.	3.	1.	.15
+	2 COMBINED AT	CPS32	472.	13.08	104.	27.	9.	1.37
+	HYDROGRAPH AT	S31A	48.	12.50	7.	2.	1.	.09
+	HYDROGRAPH AT	S31	153.	12.83	34.	9.	3.	.46
+	5 COMBINED AT	CPS31	1212.	13.08	521.	294.	113.	27.97
+	ROUTED TO	SRS31	369.	19.92	364.	282.	113.	27.97
+	ROUTED TO	S31S27	369.	20.33	364.	282.	113.	27.97
+	HYDROGRAPH AT	S27	128.	12.25	12.	3.	1.	.12
+	HYDROGRAPH AT	DS26SE	0.	.00	0.	0.	0.	.40
+	ROUTED TO	S26A27	0.	.00	0.	0.	0.	.40
+	3 COMBINED AT	CPS27	369.	20.33	364.	282.	113.	28.09
+	ROUTED TO	S27S82	369.	20.50	364.	282.	113.	28.09
+	HYDROGRAPH AT	S82	84.	12.67	16.	4.	1.	.17
+	2 COMBINED AT	CPS82	369.	20.50	364.	282.	115.	28.26
+	ROUTED TO	S8281A	369.	20.58	363.	282.	114.	28.26
+	HYDROGRAPH AT	S81A	36.	12.33	4.	1.	0.	.04
+	2 COMBINED AT	CPS81A	369.	20.58	363.	282.	115.	28.30
	ROUTED TO							

+		S81A25	369.	20.75	363.	281.	115.	28.30
+	HYDROGRAPH AT	S25	204.	13.00	56.	14.	5.	.59
+	3 COMBINED AT	CPS25	469.	16.33	429.	318.	127.	35.25
+	HYDROGRAPH AT	S81	76.	12.42	9.	2.	1.	.09
+	HYDROGRAPH AT	S82A	43.	12.25	5.	1.	0.	.03
+	ROUTED TO	S82A83	13.	16.25	5.	1.	0.	.03
+	HYDROGRAPH AT	S83	84.	13.08	26.	8.	3.	.22
+	2 COMBINED AT	CPS83	84.	13.08	29.	9.	3.	.25
+	HYDROGRAPH AT	S84	189.	12.50	33.	9.	3.	.21
+	5 COMBINED AT	DUMMY	14133.	12.50	5157.	1993.	726.	178.82
+	HYDROGRAPH AT	S35	494.	12.50	70.	19.	6.	.74
+	ROUTED TO	S35S44	389.	13.00	70.	19.	6.	.74
+	HYDROGRAPH AT	S34	700.	12.58	94.	26.	9.	.91
+	DIVERSION TO	DS34S	364.	12.58	49.	14.	5.	.91
+	HYDROGRAPH AT	DS34SE	336.	12.58	45.	13.	4.	.91
+	ROUTED TO	S34S44	296.	12.67	45.	13.	4.	.91
+	HYDROGRAPH AT	S44	104.	12.25	8.	2.	1.	.08
+	3 COMBINED AT	CPS44	599.	12.92	122.	34.	11.	1.73
+	ROUTED TO	SRS44	205.	13.67	69.	19.	6.	1.73
+	ROUTED TO	S44S45	185.	15.00	68.	19.	6.	1.73
+	HYDROGRAPH AT	DS34SE	364.	12.58	49.	14.	5.	.91
+	ROUTED TO	S34S45	292.	12.83	49.	14.	5.	.91
+	HYDROGRAPH AT	S45	511.	12.33	45.	12.	4.	.49
+	DIVERSION TO	RS45	511.	12.33	45.	12.	4.	.49
+	HYDROGRAPH AT	DS45RE	0.	.00	0.	0.	0.	.49
+	3 COMBINED AT	CPS45	292.	12.83	114.	32.	11.	2.22
+	ROUTED TO	S45S46	277.	13.00	113.	32.	11.	2.22
+	HYDROGRAPH AT	S46	1179.	12.25	95.	25.	8.	.90
+	DIVERSION TO	RS46	1179.	12.25	95.	25.	8.	.90
+	HYDROGRAPH AT	DS46RE	0.	.00	0.	0.	0.	.90
+	2 COMBINED AT	CPS46	277.	13.00	113.	32.	11.	3.12
+	ROUTED TO	SRS46	246.	13.17	108.	30.	10.	3.12
+	ROUTED TO	S46S47	186.	14.17	104.	30.	10.	3.12
+	HYDROGRAPH AT	S47	169.	12.75	35.	9.	3.	.48
+	2 COMBINED AT	CPS47	206.	14.17	127.	39.	13.	3.60
+	ROUTED TO	S47S48	190.	14.50	127.	39.	13.	3.60
+	HYDROGRAPH AT	S48	242.	12.42	35.	10.	3.	.36
+	2 COMBINED AT	CPS48	297.	12.58	156.	48.	16.	3.96
+	DIVERSION TO	DS48S	1.	12.58	1.	0.	0.	3.96
+	HYDROGRAPH AT	DS48S	296.	12.58	155.	48.	16.	3.96
	ROUTED TO							

+	S48S50	271.	13.08	152.	48.	16.	3.96
+ HYDROGRAPH AT	S49	128.	12.83	28.	7.	2.	.38
+ ROUTED TO	S49S50	117.	13.33	28.	7.	2.	.38
+ HYDROGRAPH AT	S50	127.	12.75	25.	6.	2.	.31
+ 3 COMBINED AT	CPS50	462.	13.08	198.	61.	21.	4.64
+ ROUTED TO	SRS50	292.	13.75	187.	61.	21.	4.64
+ ROUTED TO	S50S51	292.	13.75	187.	61.	21.	4.64
+ HYDROGRAPH AT	S36	186.	12.50	27.	8.	3.	.27
+ DIVERSION TO	RS36	186.	12.50	27.	8.	3.	.27
+ HYDROGRAPH AT	DS36RE	0.	.00	0.	0.	0.	.27
+ ROUTED TO	SRS36	0.	.00	0.	0.	0.	.27
+ ROUTED TO	S36S37	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	S37	473.	12.67	88.	23.	8.	1.03
+ 2 COMBINED AT	CPS37	472.	12.67	88.	23.	8.	1.30
+ ROUTED TO	S37S38	411.	13.25	88.	23.	8.	1.30
+ HYDROGRAPH AT	S38	319.	12.75	63.	16.	5.	.78
+ 2 COMBINED AT	CPS38	623.	13.17	150.	39.	13.	2.08
+ ROUTED TO	S38S39	564.	13.67	150.	39.	13.	2.08
+ HYDROGRAPH AT	S39	199.	12.92	44.	11.	4.	.60
+ 2 COMBINED AT	CPS39	659.	13.58	193.	50.	17.	2.67
+ ROUTED TO	S39S43	605.	14.25	190.	50.	17.	2.67
+ HYDROGRAPH AT	S40	217.	12.67	39.	10.	3.	.51
+ ROUTED TO	S40S41	186.	13.33	39.	10.	3.	.51
+ HYDROGRAPH AT	S41	311.	12.92	75.	19.	6.	1.00
+ 2 COMBINED AT	CPS41	446.	13.25	113.	28.	9.	1.51
+ ROUTED TO	S41S42	412.	13.75	113.	28.	9.	1.51
+ HYDROGRAPH AT	S42	182.	12.75	38.	10.	3.	.51
+ 2 COMBINED AT	CPS42	468.	13.67	149.	38.	13.	2.02
+ ROUTED TO	S42S43	448.	14.00	148.	38.	13.	2.02
+ HYDROGRAPH AT	S43	140.	12.75	28.	7.	2.	.35
+ 3 COMBINED AT	CPS43	1044.	14.17	361.	95.	32.	5.05
+ ROUTED TO	SRS43	913.	14.50	284.	95.	32.	5.05
+ ROUTED TO	S43S51	822.	15.17	283.	95.	32.	5.05
+ HYDROGRAPH AT	S33	114.	13.00	32.	8.	3.	.31
+ ROUTED TO	S33S51	99.	14.58	31.	8.	3.	.31
+ HYDROGRAPH AT	S51	76.	12.67	15.	4.	1.	.12
+ 4 COMBINED AT	CPS51	1008.	15.25	461.	158.	53.	10.12
+ ROUTED TO	SRS51	764.	15.92	350.	114.	38.	10.12
+ ROUTED TO	S51S54	745.	16.33	344.	114.	38.	10.12
+ HYDROGRAPH AT	S52	186.	13.00	51.	13.	4.	.42
ROUTED TO							

+	S52S54	180.	13.33	51.	13.	4.	.42
+ HYDROGRAPH AT	S54	338.	12.42	44.	11.	4.	.42
+ 3 COMBINED AT	CPS54	747.	16.33	344.	136.	46.	10.95
+ ROUTED TO	S54S55	702.	17.08	336.	135.	46.	10.95
+ HYDROGRAPH AT	S53	211.	12.92	50.	12.	4.	.40
+ ROUTED TO	S53S55	181.	13.92	49.	12.	4.	.40
+ HYDROGRAPH AT	S55	348.	13.00	95.	24.	8.	.75
+ 3 COMBINED AT	CPS55	701.	17.08	399.	167.	56.	12.11
+ ROUTED TO	S55S74	613.	18.75	390.	165.	56.	12.11
+ HYDROGRAPH AT	S56	279.	12.58	47.	13.	4.	.61
+ ROUTED TO	S56S57	233.	13.17	47.	12.	4.	.61
+ HYDROGRAPH AT	S57	373.	12.58	59.	15.	5.	.77
+ 2 COMBINED AT	CPS57	396.	12.92	105.	28.	9.	1.37
+ ROUTED TO	S57S58	379.	13.25	105.	28.	9.	1.37
+ HYDROGRAPH AT	DS48S	1.	12.58	1.	0.	0.	3.96
+ ROUTED TO	S48S58	1.	14.50	1.	0.	0.	3.96
+ HYDROGRAPH AT	S58	81.	12.67	14.	4.	1.	.20
+ 3 COMBINED AT	CPS58	417.	13.08	118.	31.	10.	5.53
+ ROUTED TO	SRS58	417.	13.17	118.	31.	10.	5.53
+ ROUTED TO	S58S59	397.	13.67	118.	31.	10.	5.53
+ HYDROGRAPH AT	S59	144.	12.33	14.	4.	1.	.17
+ 2 COMBINED AT	CPS59	399.	13.67	130.	35.	12.	5.70
+ ROUTED TO	SRS59	335.	14.08	98.	28.	9.	5.70
+ ROUTED TO	S59S74	289.	15.42	93.	27.	9.	5.70
+ HYDROGRAPH AT	S72	208.	13.00	56.	14.	5.	.40
+ ROUTED TO	S72S73	192.	13.67	55.	14.	5.	.40
+ HYDROGRAPH AT	S73	201.	12.67	40.	10.	3.	.28
+ 2 COMBINED AT	CPS73	245.	13.50	95.	24.	8.	.68
+ ROUTED TO	S73S74	226.	14.58	92.	24.	8.	.68
+ HYDROGRAPH AT	S74	536.	13.33	187.	47.	16.	1.61
+ 4 COMBINED AT	CPS74	1006.	15.33	565.	249.	85.	16.14
+ DIVERSION TO	DS741W	444.	15.33	247.	108.	37.	16.14
+ HYDROGRAPH AT	DS741	562.	15.33	318.	141.	48.	16.14
+ DIVERSION TO	DS742W	38.	15.33	26.	13.	4.	16.14
+ HYDROGRAPH AT	DS742	524.	15.33	292.	128.	44.	16.14
+ ROUTED TO	S74S79	490.	16.25	291.	127.	44.	16.14
+ HYDROGRAPH AT	S79	391.	13.00	109.	27.	9.	.92
+ 2 COMBINED AT	CPS79	490.	16.25	333.	151.	52.	17.05
+ ROUTED TO	S79S80	472.	16.83	327.	149.	52.	17.05
+ HYDROGRAPH AT	S92	341.	13.00	89.	22.	7.	.69
HYDROGRAPH AT							

+	DS741	444.	15.33	247.	108.	37.	16.14
+ ROUTED TO	S74S92	433.	15.50	247.	108.	37.	16.14
+ 2 COMBINED AT	CPS92	467.	13.33	300.	128.	44.	16.82
+ ROUTED TO	S92S80	434.	14.25	294.	127.	44.	16.82
+ HYDROGRAPH AT	DS742	38.	15.33	26.	13.	4.	16.14
+ ROUTED TO	S74S80	35.	17.17	26.	13.	4.	16.14
+ HYDROGRAPH AT	S80	156.	12.92	40.	11.	4.	.44
+ 4 COMBINED AT	CPS80	895.	16.67	648.	295.	103.	18.18
+ HYDROGRAPH AT	S90	79.	12.50	12.	3.	1.	.09
+ ROUTED TO	S90S91	74.	12.67	12.	3.	1.	.09
+ HYDROGRAPH AT	S91	157.	12.67	31.	8.	3.	.22
+ 2 COMBINED AT	CPS91	231.	12.67	43.	11.	4.	.31
+ HYDROGRAPH AT	S89	149.	12.58	28.	7.	2.	.20
+ HYDROGRAPH AT	S88	68.	12.33	9.	2.	1.	.07
+ HYDROGRAPH AT	S87	83.	12.67	16.	4.	1.	.12
+ HYDROGRAPH AT	S86	152.	12.50	24.	6.	2.	.20
+ HYDROGRAPH AT	S85	153.	12.92	39.	10.	3.	.34
+ 4 COMBINED AT	DUMMY	402.	12.58	88.	22.	7.	.73
+ 5 COMBINED AT	DUMMY	14642.	12.50	5671.	2220.	807.	198.24
+ HYDROGRAPH AT	W59	248.	12.17	17.	5.	2.	.17
+ ROUTED TO	W59W60	173.	12.25	17.	5.	2.	.17
+ HYDROGRAPH AT	W61	562.	12.17	34.	9.	3.	.39
+ DIVERSION TO	DW61S	189.	12.17	19.	5.	2.	.39
+ HYDROGRAPH AT	DW61SE	373.	12.17	15.	4.	1.	.39
+ HYDROGRAPH AT	W60	242.	12.17	15.	4.	1.	.16
+ 3 COMBINED AT	CPW60	768.	12.17	46.	12.	4.	.72
+ ROUTED TO	SRW60	110.	12.50	46.	12.	4.	.72
+ ROUTED TO	W60S61	108.	12.92	46.	12.	4.	.72
+ HYDROGRAPH AT	S61	363.	12.08	26.	8.	3.	.23
+ 2 COMBINED AT	CPS61	365.	12.08	71.	20.	7.	.95
+ ROUTED TO	S61S62	325.	12.25	71.	20.	7.	.95
+ HYDROGRAPH AT	S62	191.	12.17	11.	3.	1.	.13
+ 2 COMBINED AT	CPS62	490.	12.17	82.	23.	8.	1.08
+ ROUTED TO	S62S64	343.	12.42	82.	23.	8.	1.08
+ HYDROGRAPH AT	S63	741.	12.17	72.	22.	7.	.60
+ ROUTED TO	S63S64	661.	12.25	72.	22.	7.	.60
+ HYDROGRAPH AT	S64	496.	12.25	37.	9.	3.	.47
+ 3 COMBINED AT	CPS64	1369.	12.33	188.	53.	18.	2.16
+ ROUTED TO	S64S67	1369.	12.33	188.	53.	18.	2.16
+ HYDROGRAPH AT	S67	217.	12.17	14.	4.	1.	.16
2 COMBINED AT							

+	CPS67	1478.	12.33	202.	57.	19.	2.32
+ ROUTED TO	S6768A	1349.	12.42	202.	57.	19.	2.32
+ ROUTED TO	S6768B	1271.	12.50	201.	57.	19.	2.32
+ HYDROGRAPH AT	S68	223.	12.42	34.	10.	3.	.34
+ 2 COMBINED AT	CPS68	1489.	12.50	234.	66.	22.	2.65
+ ROUTED TO	S6869A	1387.	12.58	234.	66.	22.	2.65
+ ROUTED TO	S6869B	1303.	12.67	234.	66.	22.	2.65
+ HYDROGRAPH AT	S69	201.	12.58	38.	11.	4.	.47
+ 2 COMBINED AT	CPS69	1501.	12.67	271.	77.	26.	3.12
+ ROUTED TO	S69S70	1401.	12.83	271.	77.	26.	3.12
+ HYDROGRAPH AT	S70	253.	12.83	53.	13.	4.	.75
+ 2 COMBINED AT	CPS70	1651.	12.83	323.	90.	30.	3.87
+ ROUTED TO	S70S71	1538.	13.00	322.	90.	30.	3.87
+ HYDROGRAPH AT	S71	61.	12.67	12.	3.	1.	.13
+ 2 COMBINED AT	CPS71	1584.	13.00	333.	93.	31.	4.00
+ ROUTED TO	S71S78	1481.	13.25	331.	93.	31.	4.00
+ HYDROGRAPH AT	S78	52.	13.00	15.	4.	1.	.18
+ 2 COMBINED AT	CPS78	1528.	13.25	345.	96.	32.	4.18
+ HYDROGRAPH AT	DW61SE	189.	12.17	19.	5.	2.	.39
+ ROUTED TO	W61S65	104.	13.08	19.	5.	2.	.39
+ HYDROGRAPH AT	S65	772.	12.33	85.	23.	8.	.88
+ 2 COMBINED AT	CPS65	773.	12.33	104.	29.	10.	1.27
+ ROUTED TO	S65S66	567.	12.83	104.	29.	10.	1.27
+ HYDROGRAPH AT	S66	835.	12.25	85.	25.	8.	.65
+ DIVERSION TO	RS66	835.	12.25	85.	25.	8.	.65
+ HYDROGRAPH AT	DS66RE	0.	.00	0.	0.	0.	.65
+ 2 COMBINED AT	CPS66	567.	12.83	104.	29.	10.	1.92
+ ROUTED TO	SRS66	535.	12.92	104.	29.	10.	1.92
+ ROUTED TO	S66S75	475.	13.17	103.	29.	10.	1.92
+ HYDROGRAPH AT	S75	114.	12.75	23.	6.	2.	.34
+ 2 COMBINED AT	CPS75	560.	13.17	126.	34.	12.	2.26
+ ROUTED TO	S75S76	486.	13.67	125.	34.	12.	2.26
+ HYDROGRAPH AT	S76	261.	13.00	64.	16.	5.	1.01
+ 2 COMBINED AT	CPS76	633.	13.58	187.	50.	17.	3.27
+ ROUTED TO	S76S77	598.	13.83	185.	50.	17.	3.27
+ HYDROGRAPH AT	S77	338.	12.92	92.	27.	9.	.91
+ 2 COMBINED AT	CPS77	748.	13.67	274.	76.	26.	4.18

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

Existing w/CIP Conditions HEC-1 (MB02)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   19AUG09  TIME  09:26:28  *
*                                      *
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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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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
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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


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

  1           ID        Flood Control District of Maricopa County
  2           ID        L303_EX_CIP_MB02 - Loop 303/ White Tanks ADMPU AHA
  3           ID        100 YEAR
  4           ID        24 Hour Storm
  5           ID        Unit Hydrograph: S-Graph
  6           ID        08/18/2009
  7           ID            FCDMC CONTRACT 2007C031
  8           ID            BY HDR ENGINEERING (#79902)
  9           ID            EXISTING CONDITIONS WITH CIP-AUGUST 2009
 10           ID            MAJOR BASIN 02
 11           ID            FILE NAME: ECIP-MB2.DAT
 12           IT       5       0       0    2000
 13           IN      15
 14           IO       5
              *DIAGRAM
              *
 15           JD   3.941  0.0001
 16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
 18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
 19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
 26           JD   3.843     5.0
 27           JD   3.744    10.0
 28           JD   3.646    20.0
 29           JD   3.547    30.0
 30           JD   3.429    60.0
              *

 31           KK     L21BASIN
 32           KM        BASIN BOUNDARY FROM MCMICKEN DAM ON THE WEST AND THE
 33           KM        BEARDSLEY CSR ON THE EAST
 34           BA   0.525
 35           LG    0.34    0.32    4.55    0.37       1
 36           UI       0      20      20      20      21      58      70      88     109     125
 37           UI     140     158     170     180     187     193     193     194     187     179
 38           UI     172     150     140     123     113     101      93      83      76      70
 39           UI      61      56      51      45      40      38      34      31      32      22
 40           UI      21      21      20      14      14      14      13      14      11       5
              *

 41           KK  DL21REDIVERT
 42           KM        Mass grading and Storage along canal
 43           DT    RL21    57.3     0.0
 44           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 45           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 46           KK  L21L22ROUTE
 47           KM        Cross-section: Cross-section determined from A-team survey
 48           KM        Manning's N Value: earth w/sparse trees and brush, ponding against canal
 49           RS       1    FLOW
 50           RC   0.032   0.032   0.032    8793  0.0020    0.00
 51           RX  100.00  101.00  107.00  117.00  169.00  409.00  512.00  513.00
 52           RY  1328.1 1328.00 1326.00 1324.00 1324.10 1326.00 1328.00 1328.10
              *

 53           KK     L22BASIN
 54           KM        BASIN BOUNDARY FROM MCMICKEN DAM ON THE WEST AND THE
 55           KM        BEARDSLEY CSR ON THE EAST
 56           BA   0.362
 57           LG    0.34    0.34    4.35    0.39       0
 58           UI       0      19      19      21      56      79     101     124     144     162
 59           UI     170     183     184     177     172     154     133     117     103      89
 60           UI      78      68      59      52      43      38      36      29      28      20
 61           UI      20      18      13      13      13      12       5       5       4       5
 62           UI       5       4       5       4       5       5       4       0       0       0
              *

 63           KK  DL22REDIVERT
 64           KM        Storage along canal
 65           DT    RL22    15.6     0.0
 66           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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 67          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

 68          KK   CPL22COMBINE
 69          HC       2   0.887
             *

 70          KK  L22W01ROUTE
 71          KM        Cross-section: Cross-section determined from 1991 topo
 72          KM        Manning's N Value: earth w/ sparse trees and brush
 73          RS       4    FLOW
 74          RC   0.032   0.032   0.032    3159  0.0063    0.00
 75          RX  100.00  101.00  102.00  115.00  128.00  140.00  141.00  142.00
 76          RY  1320.2 1320.10 1320.00 1314.00 1314.10 1320.00 1320.10 1320.20
             *

 77          KK     W01BASIN
 78          KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
 79          BA   0.191
 80          LG    0.34    0.34    3.95    0.40       0
 81          UI       0      38     144     258     304     262     170     110      71      44
 82          UI      29      21       8       7       8       0       0       0       0       0
 83          UI       0       0       0       0       0       0       0       0       0       0
 84          UI       0       0       0       0       0       0       0       0       0       0
 85          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  3

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

 86          KK   CPW01COMBINE
 87          HC       2   1.078
             *

 88          KK  W01W02ROUTE
 89          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
 90          KM        width based on aerial
 91          KM        Manning's N Value: natural desert wash w/ vegetation
 92          RS       1    FLOW
 93          RC   0.035   0.035   0.035    2650  0.0053    0.00
 94          RX  100.00  111.00  122.00  139.00  162.00  182.00  191.00  200.00
 95          RY  1290.5 1290.25 1290.00 1286.00 1286.10 1290.00 1290.25 1290.50
             *

 96          KK     W02BASIN
 97          KM        BASIN BOUNDARY FROM 1990 TOPO, ALL FLOW TO SOUTH
 98          KM        MCMICKEN DAM ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
 99          BA   0.394
100          LG    0.35    0.35    4.65    0.32       0
101          UI       0      56     195     370     497     530     435     300     209     145
102          UI      99      70      46      38      14      13      14      13       0       0
103          UI       0       0       0       0       0       0       0       0       0       0
104          UI       0       0       0       0       0       0       0       0       0       0
105          UI       0       0       0       0       0       0       0       0       0       0
             *

106          KK   CPW02COMBINE
107          HC       2   1.472
             *

108          KK  W02W05ROUTE
109          KM        Cross-section: Natural Desert Wash w/ vegatation
110          RS       1    FLOW
111          RC   0.035   0.035   0.035    2214  0.0045    0.00
112          RX  100.00  106.00  112.00  119.00  135.00  137.00  138.00  141.00
113          RY  1280.0 1278.00 1277.00 1276.00 1275.90 1277.00 1278.00 1280.00
             *

114          KK     W03BASIN
115          KM        BASIN BOUNDARY FROM 1990 TOPO
116          BA   1.971
117          LG    0.35    0.35    4.00    0.47      20
118          UI       0     145     146     415     653     907    1064    1233    1685    1257
119          UI     947     849     756     672     606     522     442     374     341     315
120          UI     263     217     186     167     159     119     113     107      71      72
121          UI      70      71      37      27      28      28      28      28      28      28
122          UI      27      29      27       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  4

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

123          KK  W03W04ROUTE
124          KM        Cross-section: Side slopes and width based on aerial and topo
125          KM        Manning's N Value: natural desert wash w/ vegetation
126          RS       3    FLOW
127          RC   0.035   0.035   0.035   18417  0.0490    0.00
128          RX  100.00  140.00  180.00  210.00  235.00  305.00  345.00  385.00
129          RY  1511.0 1510.50 1510.00 1502.00 1502.10 1510.00 1511.00 1512.00
             *

130          KK     W04BASIN
131          KM        BASIN BOUNDARY FROM 1990 TOPO
132          BA   2.034
133          LG    0.35    0.35    4.60    0.34      10
134          UI       0     144     147     379     620     881    1032    1176    1561    1470
135          UI     998     876     788     702     637     566     477     407     357     335
136          UI     304     239     203     188     158     157     113     111     105      72
137          UI      71      71      71      40      28      28      27      28      28      28
138          UI      28      28      27      28       0       0       0       0       0       0
             *

139          KK   CPW04COMBINE
140          HC       2   4.005
             *

141          KK  W04W05ROUTE
142          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
143          KM        width based on aerial / Manning's N Value: clean straight earth
144          RS       2    FLOW
145          RC   0.035   0.035   0.035    5298  0.0098    0.00
146          RX  100.00  120.00  140.00  160.00  174.00  214.00  234.00  254.00
147          RY  1313.0 1312.50 1312.00 1308.00 1308.10 1312.00 1312.50 1313.00
             *

148          KK     W05BASIN
149          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
150          BA   0.316
```

```
151          LG    0.35    0.35    4.25    0.42       0
152          UI       0      32      62     147     214     282     302     300     260     199
153          UI     153     119      90      67      54      40      32      22      22       9
154          UI       7       8       8       8       8       0       0       0       0       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   CPW05COMBINE
158          HC       3   5.793
             *

159          KK  DW05SEDIVERT
160          KM       North Inlet Channel Divert from L303M3LA.OUT model given to HDR by
161          KM       FCDMC 05062009
162          DT   DW05S     0.0     0.0
163          DI   600.0   800.0  1000.0  1200.0  1400.0  1600.0  2000.0  2400.0  2715.0  2800.0
164          DQ   105.0   163.0   361.0   498.0   640.0   792.0  1100.0  1437.0  1605.0  1630.0
             *
1                                          HEC-1 INPUT                                          PAGE  5

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

165          KK  W0512AROUTE
166          KM       White Tanks FRS#3 North Inlet Channel South
167          KM       Channel plans FCD Contract No 2007C021
168          KM       Cholla Wash
169          RS       3    FLOW
170          RC   0.050   0.030   0.050    5306  0.0083    0.00
171          RX  1010.0 1015.00 1020.00 1050.00 1100.00 1275.00 1580.00 1750.00
172          RY  1251.0 1249.00 1249.00 1245.00 1244.90 1250.00 1250.00 1254.00
             *

173          KK     W06BASIN
174          KM       BASIN BOUNDARY FROM 1990 TOPO
175          BA   0.707
176          LG    0.35    0.35    4.30    0.41      18
177          UI       0     103     362     675     987     837     576     461     363     257
178          UI     217     150     119      90      72      49      48      20      20      19
179          UI      20      20       0       0       0       0       0       0       0       0
180          UI       0       0       0       0       0       0       0       0       0       0
181          UI       0       0       0       0       0       0       0       0       0       0
             *

182          KK     W07BASIN
183          KM       BASIN BOUNDARY FROM 1990 TOPO
184          BA   0.312
185          LG    0.35    0.35    4.25    0.42      19
186          UI       0      65     253     428     510     316     236     171     126      89
187          UI      63      46      33      26      14      11      10      10       0       0
188          UI       0       0       0       0       0       0       0       0       0       0
189          UI       0       0       0       0       0       0       0       0       0       0
190          UI       0       0       0       0       0       0       0       0       0       0
             *

191          KK   CPW07COMBINE
192          HC       2   1.019
             *

193          KK  W07W08ROUTE
194          KM       Cross-section: Based on aerial and topo
195          KM       Manning's N Value: Natural Desert wash w/ vegetation
196          KM       N value modified to slow velocity
197          RS       1    FLOW
198          RC   0.045   0.040   0.045    5589  0.0796    0.00
199          RX  100.00  136.00  173.00  197.00  234.00  254.00  298.00  342.00
200          RY  2880.0 2865.00 2850.00 2840.00 2840.00 2850.00 2865.00 2880.00
             *

201          KK     W08BASIN
202          KM       BASIN BOUNDARY FROM 1990 TOPO
203          BA   0.446
204          LG    0.35    0.35    3.95    0.40      20
205          UI       0     156     587     941     577     413     262     183     117      78
206          UI      49      32      19      19      19       0       0       0       0       0
207          UI       0       0       0       0       0       0       0       0       0       0
208          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE  6

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

209          UI       0       0       0       0       0       0       0       0       0       0
             *

210          KK   CPW08COMBINE
211          HC       2   1.465
             *

212          KK     W09BASIN
213          KM       BASIN BOUNDARY FROM 1990 TOPO
214          BA   0.335
215          LG    0.35    0.35    3.95    0.40      20
216          UI       0     125     468     716     427     304     193     127      85      53
217          UI      37      19      14      15       0       0       0       0       0       0
218          UI       0       0       0       0       0       0       0       0       0       0
219          UI       0       0       0       0       0       0       0       0       0       0
220          UI       0       0       0       0       0       0       0       0       0       0
             *

221          KK   CPW09COMBINE
222          HC       2     1.8
             *

223          KK  W09W10ROUTE
224          KM       Cross-section: Based on aerial and topo
225          KM       Manning's N Value: Natural Desert wash w/ vegetation
226          KM       N value modified to slow velocity
227          RS       1    FLOW
228          RC   0.045   0.040   0.045   11134  0.0683    0.00
229          RX  100.00  137.00  172.00  192.00  220.00  230.00  284.00  338.00
230          RY  1990.0 1975.00 1960.00 1950.00 1950.00 1960.00 1975.00 1990.00
             *

231          KK     W10BASIN
232          KM       BASIN BOUNDARY FROM 1990 TOPO
233          BA   1.338
234          LG    0.35    0.35    3.95    0.40      20
235          UI       0     153     376     806    1108    1572    1334     920     794     647
236          UI     533     402     350     278     212     175     141     119      85      75
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237          UI      75      29      30      30      29      30      29       0       0       0
238          UI       0       0       0       0       0       0       0       0       0       0
239          UI       0       0       0       0       0       0       0       0       0       0
             *

240          KK   CPW10COMBINE
241          HC       2   3.138
             *

242          KK     W11BASIN
243          KM        BASIN BOUNDARY FROM 1990 TOPO
244          BA   0.812
245          LG    0.35    0.35    3.95    0.40      20
246          UI       0     100     272     567     759    1098     696     556     469     375
247          UI     285     236     190     141     116      92      77      52      48      39
248          UI      20      19      19      19      19      20       0       0       0       0
249          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE  7

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

250          UI       0       0       0       0       0       0       0       0       0       0
             *

251          KK   CPW11COMBINE
252          HC       2    3.95
             *

253          KK  W11W12ROUTE
254          KM        Cross-section: Based on aerial and topo
255          KM        Manning's N Value: Natural Desert wash w/ vegetation
256          RS       8    FLOW
257          RC   0.045   0.035   0.045   21182  0.0205    0.00
258          RX  100.00  110.30  290.50  304.40  319.20  330.60  344.60  569.70
259          RY  1312.0 1310.00 1308.00 1306.00 1305.90 1308.00 1310.00 1312.00
             *

260          KK     W12BASIN
261          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
262          BA   1.868
263          LG    0.34    0.34    4.60    0.34       3
264          UI       0     125     126     289     490     706     847     961    1170    1474
265          UI    1002     820     727     654     604     537     483     418     353     310
266          UI     293     266     221     193     160     148     139     120      96      96
267          UI      83      61      61      61      61      37      24      24      24      24
268          UI      24      25      24      24      24      24      24       0       0       0
             *

269          KK  DW05SERETRIEVE
270          KM        Flow traveling down North Inlet Channel
271          DR   DW05S
             *

272          KK  W0512BROUTE
273          KM        White Tanks FRS#3 North Inlet Channel South
274          KM        Channel plans FCD Contract No 2007C021
275          KM        N value modifeid to mimic slowing of velocity by drop structures
276          RS       2    FLOW
277          RC   0.035   0.035   0.035    5494  0.0170    0.00
278          RX  100.00  120.00  135.00  165.00  220.00  300.00  315.00  379.00
279          RY  1244.7 1239.65 1239.50 1232.00 1231.90 1239.50 1239.65 1255.65
             *

280          KK   CPW12COMBINE
281          HC       4   11.61
             *

282          KK  W12W13ROUTE
283          KM        From NIC South Channel Plans at Sta. 535+00
284          RS       1    FLOW
285          RC   0.032   0.032   0.032    2062  0.0051    0.00
286          RX  100.00  120.00  162.50  205.00  355.00  397.50  440.00  460.00
287          RY  1218.4 1218.18 1211.10 1203.98 1204.45 1211.53 1218.65 1218.85
             *
1                                          HEC-1 INPUT                                          PAGE  8

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

288          KK     W13BASIN
289          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
290          BA   1.584
291          LG    0.35    0.35    4.90    0.29       3
292          UI       0     107     108     254     430     622     734     838    1035    1255
293          UI     820     689     615     557     511     445     405     352     287     261
294          UI     248     223     176     154     137     121     119      90      83      83
295          UI      59      52      53      53      48      21      20      21      20      21
296          UI      20      21      21      20      21      21       0       0       0       0
             *

297          KK   CPW13COMBINE
298          HC       2   13.194
             *

299          KK  W13W16ROUTE
300          KM        From NIC South Channel Plans
301          KM        at Sta. 523+00
302          RS       2    FLOW
303          RC   0.032   0.032   0.032    6257  0.0051    0.00
304          RX  100.00  115.00  162.00  209.10  359.10  435.90  465.00  480.00
305          RY  1216.9 1216.77 1208.93 1201.09 1203.09 1215.09 1223.54 1223.69
             *

306          KK     W15BASIN
307          KM        BASIN BOUNDARY FROM 1990 TOPO
308          BA   1.227
309          LG    0.35    0.35    4.55    0.35       0
310          UI       0      98     112     315     498     652     757     975    1045     671
311          UI     578     523     457     400     352     284     245     227     196     161
312          UI     128     117     107      86      75      70      49      48      47      43
313          UI      19      18      19      19      19      19      18      19      19       0
314          UI       0       0       0       0       0       0       0       0       0       0
             *

315          KK     W14BASIN
316          KM        BASIN BOUNDARY FROM 1990 TOPO
317          BA   1.582
318          LG    0.35    0.37    5.20    0.25       3
319          UI       0     165     333     776    1104    1420    1804    1142     948     811
320          UI     682     567     431     386     320     242     201     182     128     124
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321          UI      82      80      79      32      32      32      32      31      32      32
322          UI       0       0       0       0       0       0       0       0       0       0
323          UI       0       0       0       0       0       0       0       0       0       0
             *

324          KK  W14W15ROUTE
325          KM       Cross-section: Based on aerial and topo
326          KM       Manning's N Value: Natural Desert wash w/ vegetation
327          RS       3    FLOW
328          RC   0.035   0.035   0.035    7308  0.0104    0.00
329          RX  100.00  130.00  150.00  184.00  210.00  226.00  246.00  276.00
330          RY  1280.0 1276.00 1274.00 1270.00 1269.90 1274.00 1276.00 1280.00
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

331          KK   CPW15COMBINE
332          HC       2   2.809
             *

333          KK  W15W16ROUTE
334          KM       Cross-section: Based on aerial and topo
335          KM       Manning's N Value: Natural Desert wash w/ vegetation
336          RS       1    FLOW
337          RC   0.035   0.035   0.035    2750  0.0087    0.00
338          RX  100.00  135.00  232.00  328.00  360.00  498.00  635.00  735.00
339          RY  1202.0 1200.00 1199.00 1198.00 1197.90 1199.00 1200.00 1202.00
             *

340          KK     W16BASIN
341          KM       BASIN BOUNDARY FROM BEARDSLEY CSR, THE FRS#4 AND 1990 TOPO
342          BA   0.530
343          LG    0.22    0.22    4.55    0.33       0
344          UI       0      61     148     318     464     562     575     509     384     282
345          UI     211     157     115      87      65      42      42      15      14      15
346          UI      15      15       0       0       0       0       0       0       0       0
347          UI       0       0       0       0       0       0       0       0       0       0
348          UI       0       0       0       0       0       0       0       0       0       0
             *

349          KK   CPW16COMBINE
350          HC       3  16.534
             *

351          KK  W16W20ROUTE
352          KM       Cross-section: Based on aerial and topo
353          KM       Manning's N Value: clean earth; straight
354          RS       1    FLOW
355          RC   0.022   0.022   0.022    3633  0.0130    0.00
356          RX  100.00  113.00  127.00  136.00  245.00  272.00  318.00  384.00
357          RY  1186.0 1184.00 1182.00 1180.00 1179.90 1182.00 1184.00 1186.00
             *

358          KK     W18BASIN
359          KM       BASIN BOUNDARY FROM 1990 TOPO
360          BA   1.260
361          LG    0.35    0.35    4.40    0.38       8
362          UI       0      38      38      38      38      38      99     112     147     168
363          UI     200     230     242     261     278     296     307     348     390     440
364          UI     461     337     285     264     241     228     223     213     202     195
365          UI     185     177     171     161     152     148     137     130     119     110
366          UI     100      97      93      90      89      86      79      81      68      62
             *

367          KK     W17BASIN
368          KM       BASIN BOUNDARY FROM 1990 TOPO
369          BA   1.497
370          LG    0.35    0.35    4.30    0.41      18
371          UI       0     169     396     865    1197    1639    1571    1038     892     737
372          UI     607     469     398     324     247     201     173     131     110      82
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

373          UI      83      52      32      33      32      32      33      32       0       0
374          UI       0       0       0       0       0       0       0       0       0       0
375          UI       0       0       0       0       0       0       0       0       0       0
             *

376          KK  W17W18ROUTE
377          KM       Cross-section: Based on aerial and topo
378          KM       Manning's N Value: natural desert wash w/ vegetation
379          KM       and heavy vegetation
380          RS       2    FLOW
381          RC   0.045   0.035   0.045    8559  0.0257    0.00
382          RX  100.00  140.00  150.00  156.00  194.00  216.00  255.00  342.00
383          RY  1302.0 1300.00 1298.00 1296.00 1295.90 1298.00 1300.00 1302.00
             *

384          KK   CPW18COMBINE
385          HC       2   2.757
             *

386          KK  W18W20ROUTE
387          KM       Cross-section: Estimated 3' deep, side slopes and width based
388          KM       on aerial / Manning's N Value: natural desert wash w/ vegetation
389          RS       5    FLOW
390          RC   0.035   0.035   0.035    6914  0.0058    0.00
391          RX  100.00  155.00  170.00  210.00  216.00  256.00  276.00  336.00
392          RY  1249.0 1248.25 1248.00 1245.00 1245.10 1248.00 1248.25 1249.00
             *

393          KK     W19BASIN
394          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
395          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
396          BA   1.158
397          LG    0.35    0.35    3.88    0.42      20
398          UI       0     241     939    1587    1896    1172     876     636     467     328
399          UI     236     172     119      99      51      39      39      39       0       0
400          UI       0       0       0       0       0       0       0       0       0       0
401          UI       0       0       0       0       0       0       0       0       0       0
402          UI       0       0       0       0       0       0       0       0       0       0
             *

403          KK   SRW19STORAGE
404          KM       Master Drainage Plan for the Caterpillar Property (Basin #16)
405          KO
406          RS       1    STOR
```

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407          SV            1.00   31.00  114.00  270.00  502.00  807.00 1319.00 1388.00 1460.00
408          SQ                                                                                135.00
409          SE  1198.0 1200.00 1210.00 1220.00 1230.00 1240.00 1250.00 1260.00 1261.00 1262.00
410          ST
             *
1                                          HEC-1 INPUT                                          PAGE 11

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

411          KK  W19W20ROUTE
412          KM        Cross-section: Estimated 4' deep and 3:1 side slopes, width based
413          KM        on aerial / Manning's N Value: earth with sparse treese and shrubs
414          RS       1    FLOW
415          RC   0.032   0.032   0.032    3790  0.0158    0.00
416          RX  100.00  120.00  140.00  152.00  158.00  170.00  190.00  210.00
417          RY  1240.5 1240.25 1240.00 1236.00 1236.00 1240.00 1240.25 1240.50
             *

418          KK     W20BASIN
419          KM        BASIN BOUNDARY FROM WHITE TANKS #4 FRS, S-S-D CURVES
420          KM        FROM JAN 2009 FCDMC, AND FROM 1990 TOPO
421          BA   1.137
422          LG    0.29    0.29    4.10    0.44       0
423          UI       0     104     165     390     618     777     969    1101     712     596
424          UI     525     458     389     315     265     233     199     157     131     115
425          UI      98      80      71      51      50      51      26      19      20      20
426          UI      20      20      20      20      20       0       0       0       0       0
427          UI       0       0       0       0       0       0       0       0       0       0
             *

428          KK   CPW20COMBINE
429          HC       4  21.586
             *

430          KK   SRW20STORAGE
431          KM        White Tanks FRS #3 from FCDMC 1/8/2009
432          KO
433          RS       1    STOR
434          SV          135.00  385.00  810.00 1600.00 2200.00 2560.00 3175.00 4300.00 5500.00
435          SQ                                                   68.00 1343.0016310.0045000.00
436          SE  1196.0 1196.30 1199.00 1201.00 1206.00 1208.60 1210.00 1212.00 1215.00 1218.00
437          ST
             *

438          KK    W21ABASIN
439          KM        Boundary based on Preliminary Design Plans for
440          KM        White Tanks FRS #3 Outfall Channel dated
441          KM        12-08-2008 prepared by Gannett Fleming
442          BA   0.199
443          LG    0.35    0.35    4.35    0.40       0
444          UI       0      19      35      81     123     161     180     182     168     133
445          UI     102      82      62      49      38      30      21      18      13      13
446          UI       5       5       4       5       5       5       0       0       0       0
447          UI       0       0       0       0       0       0       0       0       0       0
448          UI       0       0       0       0       0       0       0       0       0       0
             *

449          KK  CPW21ACOMBINE
450          HC       2   0.199
             *
1                                          HEC-1 INPUT                                          PAGE 12

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

451          KK  21A28AROUTE
452          KM        Cross-section: Preliminary Design Plans for White Tanks
453          KM        FRS #3 Outfall Channel FCD Contract No 2004C019 Dec 08,2008
454          RS       5    FLOW
455          RC   0.045   0.035   0.045    3583  0.0013    0.00
456          RX  100.00  137.50  145.50  151.50  156.50  162.50  170.50  208.00
457          RY  1190.0 1180.62 1180.62 1178.62 1178.62 1180.62 1180.62 1190.00
             *

458          KK    W28ABASIN
459          KM        Boundary based on Preliminary Design Plans for
460          KM        White Tanks FRS #3 Outfall Channel dated
461          KM        12-08-2008 prepared by Gannett Fleming
462          BA   0.642
463          LG    0.34    0.32    4.55    0.35       1
464          UI       0      65     127     296     444     573     621     609     524     407
465          UI     308     239     181     135     110      80      64      45      44      16
466          UI      17      16      16      16      16       0       0       0       0       0
467          UI       0       0       0       0       0       0       0       0       0       0
468          UI       0       0       0       0       0       0       0       0       0       0
             *

469          KK  CPW28ACOMBINE
470          HC       2   0.841
             *

471          KK  W28A33ROUTE
472          KM        Cross-section: Determined from Preliminary Design Plans
473          KM        for White Tanks FRS #3 Outfall Channel FCD Contract
474          KM        No 2004C019 dated 12-8-08 by Gannett Fleming
475          RS       4    FLOW
476          RC   0.045   0.035   0.045    4333  0.0020    0.00
477          RX  100.00  137.50  145.50  151.50  156.50  162.50  170.50  208.00
478          RY  1180.0 1170.62 1170.62 1168.62 1168.62 1170.62 1170.62 1180.00
             *

479          KK     W33BASIN
480          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
481          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
482          BA   0.839
483          LG    0.31    0.27    4.00    0.47       4
484          UI       0      92     207     460     670     834     886     810     641     473
485          UI     361     275     195     155     114      85      63      52      23      22
486          UI      23      22      23       0       0       0       0       0       0       0
487          UI       0       0       0       0       0       0       0       0       0       0
488          UI       0       0       0       0       0       0       0       0       0       0
             *

489          KK   CPW33COMBINE
490          HC       2    1.68
             *
1                                          HEC-1 INPUT                                          PAGE 13

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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KK  W33W35ROUTE
KM        Cross-section determined from Preliminary Design
KM        Plans for White Tanks FRS #3 Outfall Channel FCD
KM        Contract No 2004C019 dated 12-8-08 by Gannett Fleming
RS       2    FLOW
RC   0.045   0.035   0.045    2658  0.0013    0.00
RX  100.00  137.50  145.50  151.50  156.50  162.50  170.50  208.00
RY  1160.0 1150.62 1150.62 1148.62 1148.62 1150.62 1150.62 1160.00
*

KK     W35BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   0.283
LG    0.32    0.34    3.71    0.47       4
UI       0      33      83     180     257     312     308     268     201     146
UI     108      80      58      43      33      22      19       8       8       8
UI       8       8       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK     W34BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   0.228
LG    0.32    0.31    3.74    0.46      20
UI       0      33     131     238     312     316     236     162     111      74
UI      52      34      23      13       9       8       9       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK   SRW34STORAGE
KM        Master Drainage Plan for the Caterpillar Property (Basin #29)
KO
RS       1    STOR
SV            0.99   12.73   23.45   36.25   50.68   54.76   59.33   83.20
SQ                                                           88.00 6226.00
SE  1164.5 1166.00 1170.00 1172.00 1174.00 1176.00 1177.50 1178.00 1180.00
ST
*

KK  W34W35ROUTE
KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
KM        aerial. Manning's N Value: clean straight earth
RS       1    FLOW
RC   0.022   0.022   0.022     813  0.0111    0.00
RX  100.00  104.00  108.00  120.00  132.00  144.00  152.00  160.00
RY  1166.2 1166.10 1166.00 1160.00 1160.10 1162.00 1162.10 1162.20
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   CPW35COMBINE
HC       3   2.191
*

KK  W3536AROUTE
KM        Cross-section: Determined from Preliminary Design Plans
KM        for White Tanks FRS #3 Outfall Channel FCD Contract
KM        No 2004C019 dated 12-8-08 by Gannett Fleming
RS       1    FLOW
RC   0.045   0.035   0.045     754  0.0020    0.00
RX  100.00  137.50  145.50  155.50  156.50  162.50  170.50  198.60
RY  1150.0 1140.62 1140.62 1138.62 1138.62 1140.62 1140.62 1150.00
*

KK  W3536BROUTE
KM        Cross-section: Determined from Preliminary Design Plans
KM        for White Tanks FRS #3 Outfall Channel FCD Contract
KM        No 2004C019 dated 12-8-08 by Gannett Fleming
RS       2    FLOW
RC   0.045   0.045   0.045    2200  0.0015    0.00
RX  100.00  111.00  123.00  135.00  185.00  197.00  209.00  229.00
RY  1140.1 1140.00 1137.00 1134.00 1133.90 1137.00 1140.00 1140.20
*

KK  W3536CROUTE
KM        Cross-section: Determined from Preliminary Design Plans
KM        for White Tanks FRS #3 Outfall Channel FCD Contract
KM        No 2004C019 dated 12-8-08 by Gannett Fleming
RS       1    FLOW
RC   0.045   0.035   0.045    2238  0.0020    0.00
RX  100.00  137.50  145.50  155.50  156.50  162.50  170.50  198.60
RY  1130.0 1120.62 1120.62 1118.62 1118.62 1120.62 1120.62 1130.00
*

KK     W36BASIN
KM        Boundary based on Aerial, topo, and Preliminary
KM        Design Plans for White Tanks FRS #3 Outfall Channel
KM        dated 12-08-2008 prepared by Gannett Fleming
BA   0.720
LG    0.31    0.28    4.00    0.47       4
UI       0      65     101     247     385     507     591     617     609     513
UI     409     329     255     204     160     126     102      76      64      45
UI      45      25      16      16      15      16      16      16       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DW36REDIVERT
KM        PASQUELETTI MOUNTAIN RANCH for areas outside Ph1 that have homes
DT    RW36    12.5     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*
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1 HEC-1 INPUT PAGE 15

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

KK   CPW36COMBINE
HC       2   2.911
*
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578          KK  W36W37ROUTE
579          KM       Cross-section determined from Preliminary Design
580          KM       Plans for White Tanks FRS #3 Outfall Channel FCD
581          KM       Contract No 2004C019 dated 12-8-08 by Gannett Fleming
582          RS      4    FLOW
583          RC   0.045   0.035   0.045    5356  0.0020    0.00
584          RX  100.00  137.50  145.50  155.50  156.50  162.50  170.50  198.60
585          RY  1100.0 1090.62 1090.62 1088.62 1088.62 1090.62 1090.62 1100.00
             *

586          KK     W37BASIN
587          KM       WESTERN LIMIT DEFINED BY JACKRABBIT WASH
588          KM       CAPACITY APPROX 12,000 CFS, VALENCIA HEIGHTS
589          BA   1.210
590          LG    0.32    0.31    4.20    0.44       4
591          UI       0      96     112     318     497     664     822     897     937     893
592          UI     777     643     515     421     344     278     221     186     148     115
593          UI     104      69      66      63      23      24      23      24      23      24
594          UI      24       0       0       0       0       0       0       0       0       0
595          UI       0       0       0       0       0       0       0       0       0       0
             *

596          KK     W22BASIN
597          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
598          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
599          BA   0.782
600          LG    0.35    0.35    4.15    0.44      19
601          UI       0     237     914    1559    1035     751     503     352     228     158
602          UI     107      80      37      31      31      31       0       0       0       0
603          UI       0       0       0       0       0       0       0       0       0       0
604          UI       0       0       0       0       0       0       0       0       0       0
605          UI       0       0       0       0       0       0       0       0       0       0
             *

606          KK  W22W23ROUTE
607          KM       Cross-section: Based on aerial and topo
608          KM       Manning's N Value: pavement and natural desert wash w/ vegetation
609          RS      1    FLOW
610          RC   0.035   0.013   0.035    4866  0.0719    0.00
611          RX  100.00  112.00  113.00  126.00  439.00  477.00  496.00  515.00
612          RY  1820.0 1815.00 1810.00 1800.00 1799.90 1810.00 1815.00 1820.00
             *

613          KK     W23BASIN
614          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
615          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
616          BA   0.897
617          LG    0.35    0.35    4.35    0.40      18
618          UI       0     236     906    1581    1306     885     636     424     309     204
619          UI     145      98      80      33      34      33      33       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

620          UI       0       0       0       0       0       0       0       0       0       0
621          UI       0       0       0       0       0       0       0       0       0       0
622          UI       0       0       0       0       0       0       0       0       0       0
             *

623          KK   CPW23COMBINE
624          HC      2   1.679
             *

625          KK  W23W24ROUTE
626          KM       Cross-section: Based on aerial and topo
627          KM       Manning's N Value: natural desert wash w/ vegetation
628          RS      1    FLOW
629          RC   0.045   0.035   0.045    5335  0.0367    0.00
630          RX  100.00  120.00  140.00  180.00  220.00  240.00  260.00  280.00
631          RY  1462.0 1461.00 1460.00 1450.00 1450.10 1460.00 1461.00 1462.00
             *

632          KK     W24BASIN
633          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
634          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
635          BA   0.475
636          LG    0.35    0.35    4.90    0.29      14
637          UI       0      88     342     575     788     483     372     280     201     154
638          UI     104      82      60      39      38      15      14      15      15       0
639          UI       0       0       0       0       0       0       0       0       0       0
640          UI       0       0       0       0       0       0       0       0       0       0
641          UI       0       0       0       0       0       0       0       0       0       0
             *

642          KK   CPW24COMBINE
643          HC      2   2.154
             *

644          KK  W24W27ROUTE
645          KM       Cross-section: Based on aerial and topo
646          KM       Manning's N Value: natural desert wash w/ vegetation
647          RS      1    FLOW
648          RC   0.035   0.035   0.035    5873  0.0289    0.00
649          RX  100.00  120.00  140.00  160.00  180.00  200.00  220.00  240.00
650          RY  1094.0 1092.00 1090.00 1084.00 1084.10 1090.00 1090.25 1090.50
             *

651          KK     W25BASIN
652          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
653          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
654          BA   1.099
655          LG    0.35    0.35    4.80    0.30       8
656          UI       0     143     438     866    1174    1490     915     737     620     467
657          UI     358     307     216     171     140     110      76      71      53      27
658          UI      28      28      27      28       0       0       0       0       0       0
659          UI       0       0       0       0       0       0       0       0       0       0
660          UI       0       0       0       0       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

661          KK   SRW25STORAGE
662          KM       Verrado on-line storage basin (WoodPatel ID SR20)
663          KO
664          RS      1    STOR
665          SV           1.05    9.43   26.91   54.31   92.89  138.67  176.47  190.08  219.05
666          SQ                                                                  265.00 1377.00
```

```
667          SE  1443.0 1446.00 1450.00 1454.00 1458.00 1462.00 1466.00 1469.00 1470.00 1472.00
668          ST
             *

669          KK  W25W26ROUTE
670          KM       Cross-section: Based on aerial and topo
671          KM       Manning's N Value: natural desert wash w/ vegetation
672          RS      1    FLOW
673          RC   0.035   0.035   0.035    6978  0.0178    0.00
674          RX  100.00  120.00  140.00  156.00  176.00  192.00  212.00  232.00
675          RY  1451.5 1451.25 1451.00 1447.00 1447.10 1451.00 1451.25 1451.50
             *

676          KK     W26BASIN
677          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
678          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
679          BA   0.682
680          LG    0.33    0.37    6.20    0.17      15
681          UI       0      86     245     500     680     926     574     465     390     304
682          UI     231     197     152     110      95      69      59      43      42      21
683          UI      17      16      17      16      17       0       0       0       0       0
684          UI       0       0       0       0       0       0       0       0       0       0
685          UI       0       0       0       0       0       0       0       0       0       0
             *

686          KK   CPW26COMBINE
687          HC      2   1.781
             *

688          KK   SRW26STORAGE
689          KM       Verrado on-line storage basin (WoodPatel ID SR21 and PH 6 Golf)
690          KO
691          RS      1    STOR
692          SV           0.68   20.68   57.58   95.91  102.34  117.65  130.00
693          SQ                                         265.00 1377.00 2000.00
694          SE  1319.0 1320.00 1330.00 1340.00 1347.00 1348.00 1350.00 1351.00
695          ST
             *

696          KK  W26W27ROUTE
697          KM       Cross-section: based on topo and aerial
698          KM       Manning's N Value: natural desert wash w/ vegetation
699          RS      1    FLOW
700          RC   0.035   0.035   0.035    3484  0.0172    0.00
701          RX  100.00  120.00  140.00  152.00  168.00  180.00  200.00  220.00
702          RY  1298.5 1298.25 1298.00 1294.00 1294.10 1298.00 1298.25 1298.50
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

703          KK     W27BASIN
704          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
705          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
706          BA   0.411
707          LG    0.32    0.37    5.80    0.20      11
708          UI       0      76     296     498     681     418     323     241     174     133
709          UI      91      71      51      34      33      13      13      13      13       0
710          UI       0       0       0       0       0       0       0       0       0       0
711          UI       0       0       0       0       0       0       0       0       0       0
712          UI       0       0       0       0       0       0       0       0       0       0
             *

713          KK   CPW27COMBINE
714          HC      3   4.345
             *

715          KK  W27W44ROUTE
716          KM       Cross-section: Clean straight earth
717          RS      1    FLOW
718          RC   0.022   0.022   0.022    7169  0.0098    0.00
719          RX  100.00  182.00  270.00  288.00  318.00  329.00  333.00  338.00
720          RY  1256.0 1254.00 1250.00 1248.00 1248.00 1250.00 1254.00 1256.00
             *

721          KK     W43BASIN
722          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
723          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
724          BA   0.209
725          LG    0.20    0.28    3.48    0.55      61
726          UI       0     971     508     111       0       0       0       0       0       0
727          UI       0       0       0       0       0       0       0       0       0       0
728          UI       0       0       0       0       0       0       0       0       0       0
729          UI       0       0       0       0       0       0       0       0       0       0
730          UI       0       0       0       0       0       0       0       0       0       0
             *

731          KK   SRW43STORAGE
732          KM       Verrado on-line storage basin (WLB) (WoodPatel ID SR23)
733          KO
734          RS      1    STOR
735          SV           6.04   20.38   53.82  120.38  216.24  325.98  455.42  606.10  645.49
736          SQ
737          SE  1272.0 1276.00 1280.00 1284.00 1288.00 1292.00 1296.00 1300.00 1304.00 1305.00
738          ST
             *

739          KK  W43W44ROUTE
740          KM       Cross-section: Side slopes and width based on aerial and topo
741          KM       Manning's N Value: natural desert wash w/ vegetation
742          RS      1    FLOW
743          RC   0.035   0.035   0.035    8415  0.0125    0.00
744          RX  100.00  145.00  180.00  210.00  220.00  245.00  270.00  295.00
745          RY  1266.0 1264.00 1262.00 1258.00 1258.00 1262.00 1265.50 1266.00
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

746          KK     W44BASIN
747          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
748          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
749          BA   0.598
750          LG    0.35    0.35    4.90    0.29       0
751          UI       0      55      89     214     334     438     500     527     506     421
752          UI     332     266     206     162     127      99      82      59      48      37
753          UI      37      13      14      13      14      13      14       0       0       0
754          UI       0       0       0       0       0       0       0       0       0       0
```

```
755          UI       0       0       0       0       0       0       0       0       0       0
             *

756          KK   CPW44COMBINE
757          HC       3   5.153
             *

758          KK  W44W46ROUTE
759          KM        Cross-section: Estimated 2' deep, side slopes and width based on aerial
760          KM        and topo. Manning's N Value: earth w/ sparse trees and shrubs
761          RS       1    FLOW
762          RC   0.032   0.032   0.032    1706  0.0070    0.00
763          RX  100.00  116.00  132.00  162.00  192.00  252.00  272.00  292.00
764          RY  1216.0 1215.00 1214.00 1208.00 1208.10 1210.00 1211.00 1212.00
             *

765          KK     W45BASIN
766          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
767          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
768          BA   1.035
769          LG    0.35    0.33    7.30    0.11       3
770          UI       0     136     414     824    1120    1399     860     697     573     441
771          UI     336     286     202     161     130     104      71      67      47      26
772          UI      26      26      26      26       0       0       0       0       0       0
773          UI       0       0       0       0       0       0       0       0       0       0
774          UI       0       0       0       0       0       0       0       0       0       0
             *

775          KK  W45W46ROUTE
776          KM        Cross-section: Based on aerial and topo
777          KM        Manning's N Value: natural desert wash w/ vegetation
778          RS       4    FLOW
779          RC   0.035   0.035   0.035    9372  0.0125    0.00
780          RX  100.00  160.00  205.00  265.00  285.00  310.00  345.00  385.00
781          RY  1274.0 1270.00 1268.00 1262.00 1262.10 1272.00 1275.50 1276.00
             *

782          KK     W46BASIN
783          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
784          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
785          BA   0.926
786          LG    0.27    0.29    6.40    0.18      16
787          UI       0      88     165     367     477     592     749    1082     916     727
788          UI     580     459     331     180     148      97      75      27      27      27
789          UI      28      27       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

790          UI       0       0       0       0       0       0       0       0       0       0
791          UI       0       0       0       0       0       0       0       0       0       0
             *

792          KK  CPW46ACOMBINE
793          HC       2   1.961
             *

794          KK  DW46REDIVERT
795          KM        Master Drainage Plan for the Caterpillar Property (Basin #27)
796          DT    RW46     0.0     0.0
797          DI     0.0    35.0    98.0   179.0   276.0   520.0   888.0  1339.0  1859.0  2439.0
798          DQ     0.0     0.0     0.0     0.0     0.0   135.0   382.0   701.0  1080.0  1509.0
             *

799          KK  CPW46BCOMBINE
800          HC       2   7.114
             *

801          KK  W46W54ROUTE
802          KM        Cross-section: side slopes, width based on aerial and topo
803          KM        Manning's N Value: natural desert wash w/ vegetation
804          RS       1    FLOW
805          RC   0.035   0.035   0.035    3908  0.0397    0.00
806          RX  100.00  112.00  124.00  140.00  160.00  190.00  220.00  240.00
807          RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
             *

808          KK     W47BASIN
809          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
810          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
811          BA   0.666
812          LG    0.35    0.35    3.95    0.40      20
813          UI       0      96     349     638     936     788     540     432     340     243
814          UI     202     142     111      83      66      47      43      19      19      18
815          UI      19      18       0       0       0       0       0       0       0       0
816          UI       0       0       0       0       0       0       0       0       0       0
817          UI       0       0       0       0       0       0       0       0       0       0
             *

818          KK     W48BASIN
819          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
820          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
821          BA   0.353
822          LG    0.35    0.35    3.95    0.40      20
823          UI       0      57     232     395     573     367     281     216     157     124
824          UI      85      65      48      36      28      20      10      11      11      11
825          UI       0       0       0       0       0       0       0       0       0       0
826          UI       0       0       0       0       0       0       0       0       0       0
827          UI       0       0       0       0       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

828          KK   CPW47COMBINE
829          HC       2   1.019
             *

830          KK  W47W49ROUTE
831          KM        Cross-section: Based on aerial and topo
832          KM        Manning's N Value: natural desert wash w/ vegetation
833          RS       1    FLOW
834          RC   0.035   0.035   0.035    5077  0.0414    0.00
835          RX  100.00  150.00  190.00  210.00  235.00  255.00  275.00  310.00
836          RY  1740.0 1720.00 1710.00 1707.00 1708.00 1714.00 1730.00 1740.00
             *

837          KK     W50BASIN
838          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
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839          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
840          BA   1.345
841          LG    0.35     0.35     4.25     0.42       19
842          UI       0      122      193      458      725      898     1129     1321      842      706
843          UI     619      546      461      378      312      278      240      189      156      135
844          UI     120       93       88       60       60       59       35       24       23       24
845          UI      23       24       24       23       23        0        0        0        0        0
846          UI       0        0        0        0        0        0        0        0        0        0
             *

847          KK     W49BASIN
848          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
849          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
850          BA   0.385
851          LG    0.35     0.35     3.95     0.40       20
852          UI       0       67      265      450      633      398      302      232      166      129
853          UI      89       70       48       35       31       16       12       12       12       11
854          UI       0        0        0        0        0        0        0        0        0        0
855          UI       0        0        0        0        0        0        0        0        0        0
856          UI       0        0        0        0        0        0        0        0        0        0
             *

857          KK   CPW49COMBINE
858          HC       3   2.749
             *

859          KK  W49W51ROUTE
860          KM        Cross-section: side slopes, width based on aerial and topo
861          KM        Manning's N Value: natural desert wash w/ vegetation
862          RS       1    FLOW
863          RC   0.035   0.035   0.035     5726   0.0253     0.00
864          RX  100.00  150.00  220.00   236.00   286.00   300.00   340.00   380.00
865          RY  1485.0 1482.00 1479.00 1476.00 1476.10 1479.00 1485.00 1490.00
             *
1                                          HEC-1 INPUT                                          PAGE 22

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

866          KK     W51BASIN
867          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
868          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
869          BA   0.149
870          LG    0.35     0.35     3.85     0.43        1
871          UI       0       21       74      140      188      200      165      113       79       55
872          UI      38       26       18       14        5        5        5        5        0        0
873          UI       0        0        0        0        0        0        0        0        0        0
874          UI       0        0        0        0        0        0        0        0        0        0
875          UI       0        0        0        0        0        0        0        0        0        0
             *

876          KK   CPW51COMBINE
877          HC       2   2.898
             *

878          KK     W52BASIN
879          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
880          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
881          BA   1.123
882          LG    0.35     0.35     4.40     0.38        9
883          UI       0      116      224      522      764      958     1288      824      673      577
884          UI     489      413      317      275      240      179      147      128      100       88
885          UI      67       57       56       35       22       22       22       22       22       22
886          UI      22        0        0        0        0        0        0        0        0        0
887          UI       0        0        0        0        0        0        0        0        0        0
             *

888          KK   CPW52COMBINE
889          HC       2   4.021
             *

890          KK  W52W53ROUTE
891          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
892          KM        aerial. Manning's N Value: natural desert wash w/ vegetation
893          RS       1    FLOW
894          RC   0.035   0.035   0.035     4917   0.0112     0.00
895          RX  100.00  118.00  124.00   130.00   146.00   150.00   164.00   182.00
896          RY  1375.0 1373.00 1370.00 1368.00 1368.00 1370.00 1373.00 1375.00
             *

897          KK     W53BASIN
898          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
899          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
900          BA   0.568
901          LG    0.30     0.32     4.45     0.42        7
902          UI       0      223      858     1219      946      528      288      161       89       32
903          UI      31        0        0        0        0        0        0        0        0        0
904          UI       0        0        0        0        0        0        0        0        0        0
905          UI       0        0        0        0        0        0        0        0        0        0
906          UI       0        0        0        0        0        0        0        0        0        0
             *
1                                          HEC-1 INPUT                                          PAGE 23

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

907          KK   CPW53COMBINE
908          HC       2   4.589
             *

909          KK  DW53REDIVERT
910          KM        Verrado - Planning Unti Drainage Plan for Portions of Planning Unit V
911          KM        (2nd Submittal) (ESTIMATED FROM GOLF BASINS IN REPORT)
912          DT    RW53      0.0      0.0
913          DI     0.0   1000.0   1500.0   2000.0   2500.0   3000.0   3500.0   4000.0   4145.0   4500.0
914          DQ     0.0     10.0    115.0    290.0    460.0    715.0    980.0   1100.0   1145.0   1260.0
             *

915          KK  W53W54ROUTE
916          KM        Cross-section: side slopes, width based on aerial and topo
917          KM        Manning's N Value: natural desert wash w/ vegetation
918          RS       2    FLOW
919          RC   0.035   0.035   0.035     9900   0.0157     0.00
920          RX  100.00  124.00  144.00   150.00   160.00   190.00   220.00   240.00
921          RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
             *

922          KK     W54BASIN
923          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
924          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
```

```
 925          BA   0.980
 926          LG    0.23    0.26    4.50    0.43      18
 927          UI       0     105     248     485     621     807    1191    1143     882     676
 928          UI     520     329     183     143     104      33      32      32      33       0
 929          UI       0       0       0       0       0       0       0       0       0       0
 930          UI       0       0       0       0       0       0       0       0       0       0
 931          UI       0       0       0       0       0       0       0       0       0       0
              *

 932          KK   CPW54COMBINE
 933          HC       3  12.683
              *

 934          KK  W54W57ROUTE
 935          KM        Cross-section: side slopes and width based on aerial
 936          KM        Manning's N Value: natural desert wash w/ vegetation
 937          RS       1    FLOW
 938          RC   0.035   0.035   0.035    5173  0.0151    0.00
 939          RX  100.00  124.00  144.00  156.00  180.00  204.00  216.00  228.00
 940          RY  1126.0 1125.00 1124.00 1114.00 1114.10 1117.00 1117.50 1118.00
              *

 941          KK     W56BASIN
 942          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 943          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 944          BA   0.448
 945          LG    0.17    0.28    4.20    0.61       5
 946          UI       0     143     474     812     956     583     279     126      47      28
 947          UI       0       0       0       0       0       0       0       0       0       0
 948          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 24

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

 949          UI       0       0       0       0       0       0       0       0       0       0
 950          UI       0       0       0       0       0       0       0       0       0       0
              *

 951          KK  DW56REDIVERT
 952          KM        Sienna Hills (aka Tesota Hills) Preliminary Drainage Report
 953          DT    RW56    35.6     0.0
 954          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 955          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 956          KK  W56W57ROUTE
 957          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
 958          KM        based on aerial / Manning's N Value: clean straight earth
 959          RS       1    FLOW
 960          RC   0.022   0.022   0.022    4948  0.0038    0.00
 961          RX  100.00  108.00  116.00  128.00  131.00  143.00  153.00  163.00
 962          RY  1108.5 1108.25 1108.00 1105.00 1105.10 1108.00 1108.25 1108.50
              *

 963          KK     W55BASIN
 964          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 965          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 966          BA   0.496
 967          LG    0.32    0.33    4.00    0.50      17
 968          UI       0      80     326     555     806     516     393     304     221     173
 969          UI     120      92      67      51      38      29      15      15      15      15
 970          UI       0       0       0       0       0       0       0       0       0       0
 971          UI       0       0       0       0       0       0       0       0       0       0
 972          UI       0       0       0       0       0       0       0       0       0       0
              *

 973          KK  DW55REDIVERT
 974          KM        Verado GOB5
 975          DT   DW55S     0.0     0.0
 976          DI     0.0    55.0   101.0   537.0  1297.0  2269.0  4708.0  7684.0 11074.0     0.0
 977          DQ     0.0     0.0     0.0   382.0  1080.0  1984.0  4269.0  7072.0 10310.0     0.0
              *

 978          KK  W55W57ROUTE
 979          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
 980          KM        based on aerial / Manning's N Value: natural desert wash w/ vegetation
 981          RS       4    FLOW
 982          RC   0.035   0.035   0.035    5747  0.0096    0.00
 983          RX  100.00  110.00  120.00  136.00  156.00  172.00  192.00  212.00
 984          RY  1136.5 1136.25 1136.00 1134.00 1134.10 1136.00 1136.25 1136.50
              *

 985          KK     W57BASIN
 986          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 987          KM        WOOD/PATEL, 2006 MODIFIED SLIGHTLY TO MATCH NEW TOPO
 988          BA   1.161
 989          LG    0.27    0.29    4.65    0.37      19
 990          UI       0     138     388     695     889    1284    1641    1231     946     700
 991          UI     409     239     166     101      43      43      42       0       0       0
1                                          HEC-1 INPUT                                          PAGE 25

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

 992          UI       0       0       0       0       0       0       0       0       0       0
 993          UI       0       0       0       0       0       0       0       0       0       0
 994          UI       0       0       0       0       0       0       0       0       0       0
              *

 995          KK  DW57REDIVERT
 996          KM        Master Drainage Plan for the Caterpillar Property (Basin #42)
 997          DT    RW57    21.6     0.0
 998          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 999          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1000          KK   CPW57COMBINE
1001          HC       4  14.788
              *

1002          KK   SRW57STORAGE
1003          KM        Verrado SR42
1004          KO
1005          RS       1    STOR
1006          SV           24.40   29.60   35.70   42.00   48.50   55.20   62.20   69.30   76.70
1007          SQ                                  368.00 1040.00 1912.00 2944.00 4114.00 5410.00
1008          SE  1084.0 1090.00 1091.00 1092.00 1093.00 1094.00 1095.00 1096.00 1097.00 1098.00
1009          ST
              *

1010          KK  W57W58ROUTE
```

```
1011          KM        Cross-section: Taken from aerial and topo
1012          RS       1    FLOW
1013          RC   0.022   0.022   0.022    1236  0.0067    0.00
1014          RX  100.00  115.50  121.80  142.00  179.30  191.30  199.60  207.80
1015          RY  1072.0 1070.00 1064.00 1062.00 1061.90 1064.00 1065.00 1066.00
              *

1016          KK     W58BASIN
1017          KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN WOOD/PATEL 2006
1018          KM        NEW 2' CI TOPO OBTAINED 2008
1019          BA   0.131
1020          LG    0.30     0.33     4.65     0.35       18
1021          UI       0       25      101      176      208      180      117       75       48       32
1022          UI      19       14        5        5        6        0        0        0        0        0
1023          UI       0        0        0        0        0        0        0        0        0        0
1024          UI       0        0        0        0        0        0        0        0        0        0
1025          UI       0        0        0        0        0        0        0        0        0        0
              *

1026          KK   CPW58COMBINE
1027          HC       2  14.919
              *
1                                          HEC-1 INPUT                                                    PAGE 26

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

1028          KK   SRW58STORAGE
1029          KM        Storage based on new topo section calculations
1030          KO
1031          RS       1    STOR
1032          SV            0.17     2.57     5.40    13.08    31.52    47.89    64.25   111.96   171.81
1033          SQ                   784.10 2217.60 3099.20 3799.80 4122.90 4540.00 6878.8012249.90
1034          SE  1084.0 1086.00 1088.00 1090.00 1092.00 1094.00 1095.00 1096.00 1098.00 1100.00
1035          ST
              *

1036          KK  DW58SEDIVERT
1037          KM        Divert is stage storage on 4-10x8 boxes under I-10. Diverted flow goes s
1038          DT   DW58S      0.0      0.0
1039          DI     0.0    100.0   2000.0   4100.0   4200.0   5000.0   6000.0   7000.0   8000.0   9000.0
1040          DQ     0.0    100.0   2000.0   4100.0   4195.5   4606.7   4833.2   4983.7   5102.6   5203.3
              *

1041          KK     W38BASIN
1042          KM        BASIN BOUNDARY FORMED BY MCDOWELL, I-10, JACKRABBIT
1043          KM        AND TUTHILL, DETAILED I-10 TOPO AND CULVERT INFO
1044          BA   0.251
1045          LG    0.32     0.32     4.65     0.33        7
1046          UI       0       30       77      163      235      279      279      236      174      127
1047          UI      93       68       51       36       27       20       14        7        7        8
1048          UI       7        0        0        0        0        0        0        0        0        0
1049          UI       0        0        0        0        0        0        0        0        0        0
1050          UI       0        0        0        0        0        0        0        0        0        0
              *

1051          KK   CPW38COMBINE
1052          HC       2   15.17
              *

1053          KK  DW38SEDIVERT
1054          KM        Full flow capacity of culverts under I-10 is diverted flow
1055          DT   DW38S      0.0      0.0
1056          DI     0.0    100.0    200.0    300.0    400.0    467.0    500.0    800.0   1000.0 10000.0
1057          DQ     0.0    100.0    200.0    300.0    400.0    467.0    467.0    467.0    467.0    467.0
              *

1058          KK  W38W37ROUTE
1059          KM        Cross section based from 1990 topo, Manning's N Value: clean earth
1060          RS       3    FLOW
1061          RC   0.022   0.022   0.022    2849  0.0053    0.00
1062          RX  100.00  204.00  440.00  608.00  687.00  700.00  736.00  759.00
1063          RY  1083.0 1082.00 1080.00 1078.00 1078.00 1080.00 1082.00 1083.00
              *

1064          KK   CPW37COMBINE
1065          HC       3  19.291
              *
1                                          HEC-1 INPUT                                                    PAGE 27

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

1066          KK  W37S60ROUTE
1067          KM        As-builts for White Tanks #4 FRS Inlet Improvements
1068          KM        Roosevelt St. to McDowell Rd FCD Contract No 94-09
1069          KM        Project No 470050, Sta. 19+31.29-28+00
1070          RS       2    FLOW
1071          RC   0.013   0.013   0.013    8927  0.0015    0.00
1072          RX  100.00  104.60  108.60  112.60  148.60  152.60  156.60  162.40
1073          RY  1051.8 1048.50 1046.50 1045.50 1044.90 1046.90 1048.90 1051.80
              *

1074          KK  DW58SERETRIEVE
1075          KM        Flow traveling from 4-10x4 boxes
1076          DR   DW58S
              *

1077          KK  W58S60ROUTE
1078          KM        Cross-section: I-10 to Van Buren, FRS #4
1079          KM        Inlet Channel, taken from aerial and topo
1080          RS       1    FLOW
1081          RC   0.035   0.035   0.035    4164  0.0067    0.00
1082          RX  100.00  115.50  121.80  142.00  179.30  191.30  199.60  207.80
1083          RY  1072.0 1070.00 1064.00 1062.00 1061.90 1064.00 1065.00 1066.00
              *

1084          KK  DW38SERETRIEVE
1085          KM        Flow traveling south from culverts under I-10
1086          DR   DW38S
              *

1087          KK  W38S60ROUTE
1088          KM        Desert, assumed 0.5% side slopes, V-ditch
1089          KM        Manning's N Value: avg value for cultivated areas from
1090          KM        Estimated Manning's Roughness Coefficient for
1091          KM        Stream Channels and Flood Plains in MC
1092          RS       8    FLOW
1093          RC   0.038   0.035   0.038    6303  0.0057    0.00
1094          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
```

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1095          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

1096          KK     S60BASIN
1097          KM        WHITE TANKS #3 FRS. S-S-D CURVE FROM JAN 2009 FCDMC CURVES
1098          BA   1.014
1099          LG    0.34    0.34    4.15    0.45       6
1100          UI       0     129     379     769    1079    1240    1151     879     642     452
1101          UI     326     235     168     120      89      55      31      32      31      32
1102          UI       0       0       0       0       0       0       0       0       0       0
1103          UI       0       0       0       0       0       0       0       0       0       0
1104          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                                HEC-1 INPUT                                                    PAGE 28

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


1105          KK   CPS60COMBINE
1106          HC       4  20.305
              *

1107          KK   SRS60STORAGE
1108          KM        White Tanks #4 from FCDMC 1/8/2009
1109          KO
1110          RS       1    STOR
1111          SV          573.00  573.00  627.00  760.00 1239.00 1263.00 1275.00 1524.00 1787.00
1112          SQ                                                   40.00   50.00 2305.00 7450.00
1113          SE  1039.0 1039.10 1041.80 1042.80 1044.80 1049.60 1049.80 1049.90 1051.80 1053.80
1114          ST
              *
1115          ZZ
1
          SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

    31        L21
              .
              .
    43        .------->    RL21
    41     DL21RE
              V
              V
    46     L21L22
              .
              .
    53        .         L22
              .           .
              .           .
    65        .           .------->    RL22
    63        .      DL22RE
              .           .
              .           .
    68      CPL22............
              V
              V
    70     L22W01
              .
              .
    77        .         W01
              .           .
              .           .
    86      CPW01............
              V
              V
    88     W01W02
              .
              .
    96        .         W02
              .           .
              .           .
   106      CPW02............
              V
              V
   108     W02W05
              .
              .
   114        .         W03
              .           V
              .           V
   123        .      W03W04
              .           .
              .           .
   130        .           .         W04
              .           .           .
              .           .           .
   139        .      CPW04............
              .           V
              .           V
   141        .      W04W05
              .           .
              .           .
   148        .           .         W05
              .           .           .
              .           .           .
   157      CPW05........................
              .
              .
   162        .------->   DW05S
   159     DW05SE
              V
              V
   165     W0512A
              .
              .
   173        .         W06
              .           .
              .           .
   182        .           .         W07
              .           .           .
              .           .           .
   191        .      CPW07............
              .           V
              .           V
   193        .      W07W08
              .           .
              .           .
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201          .           .         W08
             .           .          . .
             .           .          . .
210          .       CPW08............
             .           .
             .           .
212          .           .         W09
             .           .           .
             .           .           .
221          .       CPW09............
             .           V
             .           V
223          .      W09W10
             .           .
             .           .
231          .           .         W10
             .           .           .
             .           .           .
240          .       CPW10............
             .           .
             .           .
242          .           .         W11
             .           .           .
             .           .           .
251          .       CPW11............
             .           V
             .           V
253          .      W11W12
             .           .
             .           .
260          .           .         W12
             .           .           .
             .           .           .
271          .           .           .          .<-------   DW05S
269          .           .           .      DW05SE
             .           .           .           V
             .           .           .           V
272          .           .           .      W0512B
             .           .           .           .
             .           .           .           .
280      CPW12..................................
             V
             V
282      W12W13
             .
             .
288          .         W13
             .           .
             .           .
297      CPW13............
             V
             V
299      W13W16
             .
             .
306          .         W15
             .           .
             .           .
315          .           .         W14
             .           .           V
             .           .           V
324          .           .      W14W15
             .           .           .
             .           .           .
331          .       CPW15............
             .           V
             .           V
333          .      W15W16
             .           .
             .           .
340          .           .         W16
             .           .           .
             .           .           .
349      CPW16......................
             V
             V
351      W16W20
             .
             .
358          .         W18
             .           .
             .           .
367          .           .         W17
             .           .           V
             .           .           V
376          .           .      W17W18
             .           .           .
             .           .           .
384          .       CPW18............
             .           V
             .           V
386          .      W18W20
             .           .
             .           .
393          .           .         W19
             .           .           V
             .           .           V
403          .           .       SRW19
             .           .           V
             .           .           V
411          .           .      W19W20
             .           .           .
             .           .           .
418          .           .           .         W20
             .           .           .           .
             .           .           .           .
428      CPW20..................................
             V
             V
430      SRW20
             .
             .
438          .        W21A
             .           .
             .           .
449      CPW21A............
             V
             V
451      21A28A
             .
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458          .        W28A
             .          .
             .          .
469     CPW28A............
             V
             V
471     W28A33
             .
             .
479          .         W33
             .          .
             .          .
489      CPW33............
             V
             V
491     W33W35
             .
             .
499          .         W35
             .          .
             .          .
509          .          .        W34
             .          .          V
             .          .          V
519          .          .      SRW34
             .          .          V
             .          .          V
527          .          .     W34W35
             .          .          .
             .          .          .
534      CPW35........................
             V
             V
536     W3536A
             V
             V
544     W3536B
             V
             V
552     W3536C
             .
             .
560          .         W36
             .          .
             .          .
573          .          .-------->    RW36
571          .      DW36RE
             .          .
             .          .
576      CPW36............
             V
             V
578     W36W37
             .
             .
586          .         W37
             .          .
             .          .
596          .          .        W22
             .          .          V
             .          .          V
606          .          .     W22W23
             .          .          .
             .          .          .
613          .          .          .        W23
             .          .          .          .
             .          .          .          .
623          .          .      CPW23............
             .          .          V
             .          .          V
625          .          .     W23W24
             .          .          .
             .          .          .
632          .          .          .        W24
             .          .          .          .
             .          .          .          .
642          .          .      CPW24............
             .          .          V
             .          .          V
644          .          .     W24W27
             .          .          .
             .          .          .
651          .          .          .        W25
             .          .          .          V
             .          .          .          V
661          .          .          .      SRW25
             .          .          .          V
             .          .          .          V
669          .          .          .     W25W26
             .          .          .          .
             .          .          .          .
676          .          .          .          .        W26
             .          .          .          .          .
             .          .          .          .          .
686          .          .          .      CPW26............
             .          .          .          V
             .          .          .          V
688          .          .          .      SRW26
             .          .          .          V
             .          .          .          V
696          .          .          .     W26W27
             .          .          .          .
             .          .          .          .
703          .          .          .          .        W27
             .          .          .          .          .
             .          .          .          .          .
713          .          .      CPW27........................
             .          .          V
             .          .          V
715          .          .     W27W44
             .          .          .
             .          .          .
721          .          .          .        W43
             .          .          .          V
             .          .          .          V
731          .          .          .      SRW43
             .          .          .          V
             .          .          .          V
739          .          .          .     W43W44
```

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746                                   W44
756                 CPW44.......................
                        V
                        V
758                 W44W46

765                         W45
                              V
                              V
775                       W45W46

782                                   W46

792                       CPW46A............
                                      .------->    RW46
796
794                       DW46RE

799                 CPW46B............
                        V
                        V
801                 W46W54

808                         W47

818                                   W48

828                        CPW47............
                              V
                              V
830                       W47W49

837                                   W50

847                                                W49

857                        CPW49........................
                              V
                              V
859                       W49W51

866                                   W51

876                        CPW51............

878                                   W52

888                        CPW52............
                              V
                              V
890                       W52W53

897                                   W53

907                        CPW53............

912                                   .------->    RW53
909                       DW53RE
                              V
                              V
915                       W53W54

922                                   W54

932                 CPW54.......................
                        V
                        V
934                 W54W57

941                         W56

953                                   .------->    RW56
951                       DW56RE
                              V
                              V
956                       W56W57

963                                   W55

975                                   .------->   DW55S
973                                DW55RE
                                      V
                                      V
978                                W55W57

985                                                W57

997                                                .------->    RW57
995                                            DW57RE
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1000          .          .      CPW57.................................
              .          .          V
              .          .          V
1002          .          .      SRW57
              .          .          V
              .          .          V
1010          .          .     W57W58
              .          .          .
              .          .          .
1016          .          .          .        W58
              .          .          .          .
              .          .          .          .
1026          .          .      CPW58............
              .          .          V
              .          .          V
1028          .          .      SRW58
              .          .          .
              .          .          .
1038          .          .          .-------->   DW58S
1036          .          .     DW58SE
              .          .          .
              .          .          .
1041          .          .          .        W38
              .          .          .          .
              .          .          .          .
1051          .          .      CPW38............
              .          .          .
              .          .          .
1055          .          .          .-------->   DW38S
1053          .          .     DW38SE
              .          .          V
              .          .          V
1058          .          .     W38W37
              .          .          .
              .          .          .
1064      CPW37........................
              V
              V
1066      W37S60
              .
              .
1076          .          .<--------   DW58S
1074          .     DW58SE
              .          V
              .          V
1077          .     W58S60
              .          .
              .          .
1086          .          .          .<--------   DW38S
1084          .          .     DW38SE
              .          .          V
              .          .          V
1087          .          .     W38S60
              .          .          .
              .          .          .
1096          .          .          .        S60
              .          .          .          .
              .          .          .          .
1105      CPS60....................................
              V
              V
1107      SRS60
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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	L21	194.	13.25	57.	14.	5.	.52		
+	DIVERSION TO	RL21	194.	13.25	57.	14.	5.	.52		
+	HYDROGRAPH AT	DL21RE	0.	.00	0.	0.	0.	.52		
+	ROUTED TO	L21L22	0.	.00	0.	0.	0.	.52		
+	HYDROGRAPH AT	L22	174.	12.92	38.	10.	3.	.36		
+	DIVERSION TO	RL22	174.	12.92	31.	8.	3.	.36		
+	HYDROGRAPH AT	DL22RE	56.	13.75	7.	2.	1.	.36		
+	2 COMBINED AT	CPL22	56.	13.75	7.	2.	1.	.89		
+	ROUTED TO	L22W01	44.	14.00	7.	2.	1.	.89		
+	HYDROGRAPH AT	W01	251.	12.25	20.	5.	2.	.19		
+	2 COMBINED AT	CPW01	250.	12.25	27.	7.	2.	1.08		
+	ROUTED TO	W01W02	196.	12.33	27.	7.	2.	1.08		
+	HYDROGRAPH AT	W02	460.	12.33	44.	11.	4.	.39		
+	2 COMBINED AT	CPW02	654.	12.33	70.	18.	6.	1.47		
+	ROUTED TO	W02W05	610.	12.42	70.	18.	6.	1.47		
+	HYDROGRAPH AT	W03	1389.	12.58	268.	79.	26.	1.97		

+	ROUTED TO	W03W04	1199.	12.83	268.	79.	26.	1.97
+	HYDROGRAPH AT	W04	1416.	12.58	258.	71.	24.	2.03
+	2 COMBINED AT	CPW04	2357.	12.67	523.	149.	50.	4.01
+	ROUTED TO	W04W05	2225.	12.83	523.	149.	50.	4.01
+	HYDROGRAPH AT	W05	269.	12.42	32.	8.	3.	.32
+	3 COMBINED AT	CPW05	2514.	12.75	618.	173.	58.	5.79
+	DIVERSION TO	DW05S	1498.	12.75	310.	95.	32.	5.79
+	HYDROGRAPH AT	DW05SE	1016.	12.75	309.	77.	26.	5.79
+	ROUTED TO	W0512A	989.	12.92	309.	77.	26.	5.79
+	HYDROGRAPH AT	W06	817.	12.25	97.	28.	9.	.71
+	HYDROGRAPH AT	W07	402.	12.25	43.	13.	4.	.31
+	2 COMBINED AT	CPW07	1216.	12.25	139.	40.	13.	1.02
+	ROUTED TO	W07W08	1095.	12.33	139.	40.	13.	1.02
+	HYDROGRAPH AT	W08	683.	12.17	64.	19.	6.	.45
+	2 COMBINED AT	CPW08	1605.	12.25	203.	59.	20.	1.47
+	HYDROGRAPH AT	W09	521.	12.17	48.	14.	5.	.34
+	2 COMBINED AT	CPW09	2066.	12.25	250.	73.	24.	1.80
+	ROUTED TO	W09W10	1764.	12.33	250.	73.	24.	1.80
+	HYDROGRAPH AT	W10	1366.	12.33	191.	56.	19.	1.34
+	2 COMBINED AT	CPW10	3122.	12.33	440.	128.	43.	3.14
+	HYDROGRAPH AT	W11	864.	12.33	116.	34.	11.	.81
+	2 COMBINED AT	CPW11	3979.	12.33	556.	162.	54.	3.95
+	ROUTED TO	W11W12	2842.	13.00	556.	162.	54.	3.95
+	HYDROGRAPH AT	W12	1189.	12.58	215.	55.	18.	1.87
+	HYDROGRAPH AT	DW05SE	1498.	12.75	310.	95.	32.	5.79
+	ROUTED TO	W0512B	1461.	12.92	309.	95.	32.	5.79
+	4 COMBINED AT	CPW12	5628.	13.00	1321.	372.	124.	11.61
+	ROUTED TO	W12W13	5596.	13.00	1321.	372.	124.	11.61
+	HYDROGRAPH AT	W13	1057.	12.58	188.	48.	16.	1.58
+	2 COMBINED AT	CPW13	6092.	13.00	1486.	414.	139.	13.19
+	ROUTED TO	W13W16	5946.	13.17	1485.	414.	139.	13.19
+	HYDROGRAPH AT	W15	876.	12.50	132.	33.	11.	1.23
+	HYDROGRAPH AT	W14	1486.	12.33	193.	50.	17.	1.58
+	ROUTED TO	W14W15	1340.	12.58	193.	50.	17.	1.58
+	2 COMBINED AT	CPW15	2177.	12.58	324.	82.	27.	2.81
+	ROUTED TO	W15W16	1944.	12.67	324.	82.	27.	2.81
+	HYDROGRAPH AT	W16	581.	12.33	66.	17.	6.	.53
+	3 COMBINED AT	CPW16	6978.	13.08	1823.	500.	167.	16.53
+	ROUTED TO	W16W20	6961.	13.08	1822.	500.	167.	16.53
+	HYDROGRAPH AT	W18	431.	13.50	135.	36.	12.	1.26

+	HYDROGRAPH AT	W17	1460.	12.33	204.	59.	20.	1.50
+	ROUTED TO	W17W18	1296.	12.50	204.	59.	20.	1.50
+	2 COMBINED AT	CPW18	1438.	12.50	337.	95.	32.	2.76
+	ROUTED TO	W18W20	1255.	12.92	337.	95.	32.	2.76
+	HYDROGRAPH AT	W19	1510.	12.25	164.	48.	16.	1.16
+	ROUTED TO	SRW19	0.	.00	0.	0.	0.	1.16
+	ROUTED TO	W19W20	0.	.00	0.	0.	0.	1.16
+	HYDROGRAPH AT	W20	890.	12.42	121.	30.	10.	1.14
+	4 COMBINED AT	CPW20	8089.	13.08	2199.	603.	202.	21.59
+	ROUTED TO	SRW20	0.	.00	0.	0.	0.	21.59
+	HYDROGRAPH AT	W21A	163.	12.42	21.	5.	2.	.20
+	2 COMBINED AT	CPW21A	163.	12.42	21.	5.	2.	.20
+	ROUTED TO	21A28A	138.	12.83	21.	5.	2.	.20
+	HYDROGRAPH AT	W28A	591.	12.42	72.	18.	6.	.64
+	2 COMBINED AT	CPW28A	620.	12.42	93.	23.	8.	.84
+	ROUTED TO	W28A33	567.	12.75	93.	23.	8.	.84
+	HYDROGRAPH AT	W33	795.	12.42	95.	25.	8.	.84
+	2 COMBINED AT	CPW33	1111.	12.50	187.	48.	16.	1.68
+	ROUTED TO	W33W35	1042.	12.67	187.	48.	16.	1.68
+	HYDROGRAPH AT	W35	273.	12.33	31.	8.	3.	.28
+	HYDROGRAPH AT	W34	291.	12.25	33.	10.	3.	.23
+	ROUTED TO	SRW34	0.	.00	0.	0.	0.	.23
+	ROUTED TO	W34W35	0.	.00	0.	0.	0.	.23
+	3 COMBINED AT	CPW35	1177.	12.67	217.	56.	19.	2.19
+	ROUTED TO	W3536A	1176.	12.67	217.	56.	19.	2.19
+	ROUTED TO	W3536B	1139.	12.83	217.	56.	19.	2.19
+	ROUTED TO	W3536C	1081.	12.92	217.	56.	19.	2.19
+	HYDROGRAPH AT	W36	578.	12.50	81.	21.	7.	.72
+	DIVERSION TO	RW36	494.	12.33	24.	6.	2.	.72
+	HYDROGRAPH AT	DW36RE	578.	12.50	58.	15.	5.	.72
+	2 COMBINED AT	CPW36	1341.	12.83	274.	70.	23.	2.91
+	ROUTED TO	W36W37	1272.	13.17	273.	70.	23.	2.91
+	HYDROGRAPH AT	W37	865.	12.58	134.	35.	12.	1.21
+	HYDROGRAPH AT	W22	1108.	12.17	107.	31.	10.	.78
+	ROUTED TO	W22W23	1073.	12.25	107.	31.	10.	.78
+	HYDROGRAPH AT	W23	1227.	12.17	123.	36.	12.	.90
+	2 COMBINED AT	CPW23	2264.	12.25	230.	67.	22.	1.68
+	ROUTED TO	W23W24	2100.	12.25	229.	67.	22.	1.68
+	HYDROGRAPH AT	W24	623.	12.25	66.	18.	6.	.47
+	2 COMBINED AT	CPW24	2718.	12.25	295.	85.	28.	2.15

+	ROUTED TO	W24W27	2495.	12.33	295.	85.	28.	2.15
+	HYDROGRAPH AT	W25	1198.	12.25	140.	38.	13.	1.10
+	ROUTED TO	SRW25	0.	.00	0.	0.	0.	1.10
+	ROUTED TO	W25W26	0.	.00	0.	0.	0.	1.10
+	HYDROGRAPH AT	W26	812.	12.33	105.	29.	10.	.68
+	2 COMBINED AT	CPW26	810.	12.33	105.	29.	10.	1.78
+	ROUTED TO	SRW26	0.	.00	0.	0.	0.	1.78
+	ROUTED TO	W26W27	0.	.00	0.	0.	0.	1.78
+	HYDROGRAPH AT	W27	563.	12.25	59.	16.	5.	.41
+	3 COMBINED AT	CPW27	2984.	12.33	352.	101.	34.	4.34
+	ROUTED TO	W27W44	2554.	12.42	352.	101.	34.	4.34
+	HYDROGRAPH AT	W43	517.	12.08	45.	15.	5.	.21
+	ROUTED TO	SRW43	0.	.00	0.	0.	0.	.21
+	ROUTED TO	W43W44	0.	.00	0.	0.	0.	.21
+	HYDROGRAPH AT	W44	510.	12.50	68.	17.	6.	.60
+	3 COMBINED AT	CPW44	3047.	12.42	419.	117.	39.	5.15
+	ROUTED TO	W44W46	3031.	12.50	418.	117.	39.	5.15
+	HYDROGRAPH AT	W45	1302.	12.25	155.	40.	13.	1.03
+	ROUTED TO	W45W46	1134.	12.58	155.	40.	13.	1.03
+	HYDROGRAPH AT	W46	1085.	12.50	148.	42.	14.	.93
+	2 COMBINED AT	CPW46A	2199.	12.50	303.	81.	27.	1.96
+	DIVERSION TO	RW46	1331.	12.50	132.	33.	11.	1.96
+	HYDROGRAPH AT	DW46RE	868.	12.50	171.	48.	16.	1.96
+	2 COMBINED AT	CPW46B	3824.	12.50	578.	162.	54.	7.11
+	ROUTED TO	W46W54	3747.	12.58	578.	162.	54.	7.11
+	HYDROGRAPH AT	W47	794.	12.25	95.	28.	9.	.67
+	HYDROGRAPH AT	W48	444.	12.25	51.	15.	5.	.35
+	2 COMBINED AT	CPW47	1236.	12.25	146.	43.	14.	1.02
+	ROUTED TO	W47W49	1152.	12.33	146.	43.	14.	1.02
+	HYDROGRAPH AT	W50	1126.	12.42	185.	54.	18.	1.35
+	HYDROGRAPH AT	W49	491.	12.25	55.	16.	5.	.38
+	3 COMBINED AT	CPW49	2575.	12.33	385.	112.	37.	2.75
+	ROUTED TO	W49W51	2391.	12.42	385.	112.	37.	2.75
+	HYDROGRAPH AT	W51	166.	12.33	16.	4.	1.	.15
+	2 COMBINED AT	CPW51	2531.	12.42	400.	116.	39.	2.90
+	HYDROGRAPH AT	W52	987.	12.42	137.	37.	12.	1.12
+	2 COMBINED AT	CPW52	3510.	12.42	536.	153.	51.	4.02
+	ROUTED TO	W52W53	3260.	12.50	536.	153.	51.	4.02
+	HYDROGRAPH AT	W53	909.	12.17	66.	18.	6.	.57
+	2 COMBINED AT	CPW53	3427.	12.50	601.	170.	57.	4.59

+	DIVERSION TO	RW53	941.	12.50	87.	22.	7.	4.59
+	HYDROGRAPH AT	DW53RE	2486.	12.50	514.	148.	50.	4.59
+	ROUTED TO	W53W54	2364.	12.67	513.	148.	50.	4.59
+	HYDROGRAPH AT	W54	1096.	12.42	139.	40.	13.	.98
+	3 COMBINED AT	CPW54	6696.	12.58	1184.	337.	113.	12.68
+	ROUTED TO	W54W57	6502.	12.67	1184.	337.	113.	12.68
+	HYDROGRAPH AT	W56	644.	12.25	46.	12.	4.	.45
+	DIVERSION TO	RW56	644.	12.25	46.	12.	4.	.45
+	HYDROGRAPH AT	DW56RE	0.	.00	0.	0.	0.	.45
+	ROUTED TO	W56W57	0.	.00	0.	0.	0.	.45
+	HYDROGRAPH AT	W55	585.	12.25	65.	19.	6.	.50
+	DIVERSION TO	DW55S	426.	12.25	30.	8.	3.	.50
+	HYDROGRAPH AT	DW55RE	159.	12.25	34.	11.	4.	.50
+	ROUTED TO	W55W57	144.	12.58	34.	11.	4.	.50
+	HYDROGRAPH AT	W57	1425.	12.42	169.	49.	16.	1.16
+	DIVERSION TO	RW57	651.	12.08	37.	11.	4.	1.16
+	HYDROGRAPH AT	DW57RE	1425.	12.42	144.	38.	13.	1.16
+	4 COMBINED AT	CPW57	7485.	12.58	1338.	380.	127.	14.79
+	ROUTED TO	SRW57	7275.	12.67	1338.	364.	121.	14.79
+	ROUTED TO	W57W58	7266.	12.67	1338.	364.	121.	14.79
+	HYDROGRAPH AT	W58	188.	12.25	19.	5.	2.	.13
+	2 COMBINED AT	CPW58	7299.	12.67	1354.	369.	123.	14.92
+	ROUTED TO	SRW58	5858.	12.92	1355.	369.	123.	14.92
+	DIVERSION TO	DW58S	4801.	12.92	1281.	350.	117.	14.92
+	HYDROGRAPH AT	DW58SE	1057.	12.92	74.	18.	6.	14.92
+	HYDROGRAPH AT	W38	272.	12.33	32.	8.	3.	.25
+	2 COMBINED AT	CPW38	1103.	12.92	103.	26.	9.	15.17
+	DIVERSION TO	DW38S	467.	12.75	71.	18.	6.	15.17
+	HYDROGRAPH AT	DW38SE	636.	12.92	32.	8.	3.	15.17
+	ROUTED TO	W38W37	534.	13.08	32.	8.	3.	15.17
+	3 COMBINED AT	CPW37	1890.	13.08	394.	102.	34.	19.29
+	ROUTED TO	W37S60	1721.	13.25	393.	102.	34.	19.29
+	HYDROGRAPH AT	DW58SE	4801.	12.92	1281.	350.	117.	14.92
+	ROUTED TO	W58S60	4778.	13.00	1280.	350.	117.	14.92
+	HYDROGRAPH AT	DW38SE	467.	12.75	71.	18.	6.	15.17
+	ROUTED TO	W38S60	406.	13.50	71.	18.	6.	15.17
+	HYDROGRAPH AT	S60	1054.	12.33	113.	30.	10.	1.01
+	4 COMBINED AT	CPS60	6609.	13.17	1824.	492.	164.	20.31
+	ROUTED TO	SRS60	0.	.00	0.	0.	0.	20.31

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

Future w/CIP Conditions HEC-1 (MB01)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1*************************************                                    *************************************
 *                                   *                                    *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                *   U.S. ARMY CORPS OF ENGINEERS    *
 *            JUN   1998             *                                    *   HYDROLOGIC ENGINEERING CENTER   *
 *          VERSION 4.1              *                                    *         609 SECOND STREET         *
 *                                   *                                    *      DAVIS, CALIFORNIA 95616      *
 *  RUN DATE   19AUG09  TIME  09:35:59 *                                  *          (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        L303_FU_CIP_MB01 - Loop 303/ White Tanks ADMPU AHA
        3           ID        100 YEAR
        4           ID        24 Hour Storm
        5           ID        Unit Hydrograph: S-Graph
        6           ID        08/18/2009
        7           ID            FCDMC CONTRACT 2007C031
        8           ID            BY HDR ENGINEERING (#79902)
        9           ID            FUTURE CONDITIONS WITH CIP-AUGUST 2009
       10           ID            MAJOR BASIN 01
       11           ID            FILE NAME: FCIP-MB1.DAT
       12           IT       5       0       0    2000
       13           IN      15
       14           IO       5
                    *DIAGRAM
                    *
       15           JD   3.480  0.0001
       16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
       17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
       18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
       19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
       20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
       21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
       22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
       23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
       24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
       25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
       26           JD   3.393     5.0
       27           JD   3.306    10.0
       28           JD   3.219    20.0
       29           JD   3.132    30.0
       30           JD   3.028    60.0
       31           JD   2.965    90.0
       32           JD   2.927   120.0
                    *

       33           KK     N07BASIN
       34           KM        BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
       35           BA   0.570
       36           LG    0.16    0.25    5.40    0.30      61
       37           UI       0     107     405     604     990     931     612     389     172     105
       38           UI      36      29      29       0       0       0       0       0       0       0
       39           UI       0       0       0       0       0       0       0       0       0       0
       40           UI       0       0       0       0       0       0       0       0       0       0
       41           UI       0       0       0       0       0       0       0       0       0       0
                    *

       42           KK  DN07REDIVERT
       43           KM        Additional Retention based on 100yr 2hr retention.
       44           KM        C value is based on future land use, P=2.7, A=acres
       45           DT    RN07    56.1     0.0
       46           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
       47           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                    *
1                                          HEC-1 INPUT                                                    PAGE  2

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

       48           KK   DN07ADIVERT
       49           KM        Divert portion through openings in Corte Bella perimeter walls
       50           DT  DN07AS     0.0     0.0
       51           DI     0.0     9.0    64.0   243.0  1000.0     0.0     0.0     0.0     0.0     0.0
       52           DQ     0.0     0.0    26.0   116.0   116.0     0.0     0.0     0.0     0.0     0.0
                    *

       53           KK   DN07BDIVERT
       54           KM        Divert portion through openings in Corte Bella perimeter walls
       55           DT  DN07BS     0.0     0.0
       56           DI     0.0    11.4    22.9   152.3   289.9  1000.0     0.0     0.0     0.0     0.0
       57           DQ     0.0     0.0     4.9    69.1   127.9   127.9     0.0     0.0     0.0     0.0
                    *

       58           KK   DN07CDIVERT
       59           KM        Divert portion through openings in Corte Bella perimeter walls
       60           DT  DN07CS     0.0     0.0
       61           DI     0.0    64.4   209.0   452.0  1000.0     0.0     0.0     0.0     0.0     0.0
       62           DQ     0.0     0.0    38.0   107.0   107.0     0.0     0.0     0.0     0.0     0.0
                    *

       63           KK   DN07DDIVERT
       64           KM        Divert at Corte Bella
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 65          DT  DN07DS      0.0      0.0
 66          DI     0.0    138.7    164.6    352.2    558.0   1000.0      0.0      0.0      0.0      0.0
 67          DQ     0.0    138.7    159.8    299.2    450.0    450.0      0.0      0.0      0.0      0.0
             *

 68          KK  N07N06ROUTE
 69          KM        Pleasant Valley Country Club Master Drainage Plan
 70          KM        by DEI dated May 17, 2001
 71          RS       1    FLOW
 72          RC   0.035   0.035   0.035    6607  0.0045    0.00
 73          RX  100.00  120.00  140.00  152.00  156.00  168.00  183.00  198.00
 74          RY  1042.5 1042.25 1042.00 1039.00 1039.10 1042.00 1042.10 1042.20
             *

 75          KK     N01BASIN
 76          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION BOUNDARY
 77          KM        GRAND AVE AND MCMICKEN DAM
 78          BA   0.345
 79          LG    0.14    0.24    4.60    0.44      51
 80          UI       0     180     550     948     595     255      94      27       0       0
 81          UI       0       0       0       0       0       0       0       0       0       0
 82          UI       0       0       0       0       0       0       0       0       0       0
 83          UI       0       0       0       0       0       0       0       0       0       0
 84          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  3

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

 85          KK  DN01REDIVERT
 86          KM        Additional Retention based on 100yr 2hr retention.
 87          KM        C value is based on future land use, P=2.7, A=acres
 88          DT    RN01    27.9     0.0
 89          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 90          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

 91          KK    N02ABASIN
 92          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER
 93          KM        DRAINAGE PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT
 94          KM        AS-BUILT CONDITIONS AND MC MICKEN DAM
 95          BA   0.083
 96          LG    0.10    0.24    5.00    0.39      30
 97          UI       0      11      37      60      80     129     108      80      59      32
 98          UI      19      12       6       3       3       4       0       0       0       0
 99          UI       0       0       0       0       0       0       0       0       0       0
100          UI       0       0       0       0       0       0       0       0       0       0
101          UI       0       0       0       0       0       0       0       0       0       0
             *

102          KK  DN02ARDIVERT
103          KM        Additional Retention based on 100yr 2hr retention.
104          KM        C value is based on future land use, P=2.7, A=acres
105          DT   RN02A     8.4     0.0
106          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
107          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

108          KK  N2AN01ROUTE
109          KM        Cross-section: cross-section from aerial
110          KM        Manning's N Value: Natural desert wash with vegetation
111          RS       1    FLOW
112          RC   0.035   0.035   0.035    2386  0.0010    0.00
113          RX  100.00  120.00  140.00  149.00  150.00  160.00  180.00  200.00
114          RY  1000.0  999.50  999.00  997.00  997.10  999.00  999.50 1000.00
             *

115          KK   CPN01COMBINE
116          HC       2   0.428
             *

117          KK  N01N02ROUTE
118          KM        Cross-section:  / Manning's N Value: Concrete channel
119          KM        10-ft bottom, with 2:1 side slopes, left and right
120          KM        Mannings N Value: clean earth, straight
121          RS       1    FLOW
122          RC   0.022   0.016   0.022    3902  0.0051    0.00
123          RX  100.00  100.10  112.00  122.00  132.00  142.00  153.90  154.00
124          RY  1300.0 1295.30 1295.00 1290.00 1290.10 1295.00 1295.30 1300.00
             *
1                                          HEC-1 INPUT                                          PAGE  4

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

125          KK     N02BASIN
126          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
127          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
128          BA   0.510
129          LG    0.20    0.25    5.20    0.33      21
130          UI       0     150     511     824    1102     698     371     157      71      31
131          UI      31       0       0       0       0       0       0       0       0       0
132          UI       0       0       0       0       0       0       0       0       0       0
133          UI       0       0       0       0       0       0       0       0       0       0
134          UI       0       0       0       0       0       0       0       0       0       0
             *

135          KK  DN02REDIVERT
136          KM        Sun City West Expansion Area 2
137          DT    RN02    38.4     0.0
138          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
139          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

140          KK    N03ABASIN
141          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
142          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
143          KM        MICKEN DAM
144          BA   0.065
145          LG    0.17    0.24    4.90    0.38      21
146          UI       0      14      50      76     126     101      66      35      17       9
147          UI       4       3       0       0       0       0       0       0       0       0
148          UI       0       0       0       0       0       0       0       0       0       0
149          UI       0       0       0       0       0       0       0       0       0       0
150          UI       0       0       0       0       0       0       0       0       0       0
             *

151          KK  DN03ARDIVERT
152          KM        Additional Retention based on 100yr 2hr retention.
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153          KM        C value is based on future land use, P=2.7, A=acres
154          DT   RN03A     4.1     0.0
155          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
156          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

157          KK  N3AN02ROUTE
158          KM        Cross-section:  / Manning's N Value: Golf course channel
159          RS      12    FLOW
160          RC   0.025   0.025   0.025    5514  0.0054    0.00
161          RX  100.00  120.00  140.00  180.00  280.00  340.00  360.00  380.00
162          RY  1000.0  998.50  997.40  995.00  995.00  997.70  998.70 1000.00
             *

163          KK   CPN02COMBINE
164          HC       3   1.003
             *
1                                          HEC-1 INPUT                                          PAGE  5

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

165          KK  N02N3BROUTE
166          KM        Cross-section:  / Manning's N Value: Golf course channel
167          KM        Route is from CPN02 to CPN03B
168          RS       9    FLOW
169          RC   0.025   0.025   0.025    3992  0.0020    0.00
170          RX  100.00  130.00  150.00  155.00  215.00  220.00  230.00  245.00
171          RY  1288.5 1286.00 1283.00 1282.50 1282.60 1283.00 1285.00 1286.00
             *

172          KK    N03BBASIN
173          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
174          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
175          BA   0.285
176          LG    0.23    0.25    4.80    0.36      30
177          UI       0     109     342     619     573     335     131      58      19      20
178          UI       0       0       0       0       0       0       0       0       0       0
179          UI       0       0       0       0       0       0       0       0       0       0
180          UI       0       0       0       0       0       0       0       0       0       0
181          UI       0       0       0       0       0       0       0       0       0       0
             *

182          KK  DN3BREDIVERT
183          KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
184          DT   RN03B     8.0     0.0
185          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
186          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

187          KK  CPN03BCOMBINE
188          HC       2   1.288
             *

189          KK  N3BN04ROUTE
190          KM        Cross-section:  / Manning's N Value: Golf course channel
191          KM        Route is from CPN03B to CPN04
192          RS       8    FLOW
193          RC   0.025   0.025   0.025    5663  0.0020    0.00
194          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
195          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

196          KK     N04BASIN
197          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
198          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
199          BA   0.992
200          LG    0.21    0.25    5.40    0.29      26
201          UI       0     109     275     516     663     871    1299    1124     873     660
202          UI     493     272     185     123      79      33      34      34      34       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          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  6

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

206          KK     N03BASIN
207          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
208          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
209          BA   0.358
210          LG    0.24    0.26    4.65    0.39      27
211          UI       0     105     359     578     774     490     261     110      50      21
212          UI      22       0       0       0       0       0       0       0       0       0
213          UI       0       0       0       0       0       0       0       0       0       0
214          UI       0       0       0       0       0       0       0       0       0       0
215          UI       0       0       0       0       0       0       0       0       0       0
             *

216          KK  DN03REDIVERT
217          KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
218          DT    RN03    10.0     0.0
219          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
220          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

221          KK  N03N04ROUTE
222          KM        Cross-section:  / Manning's N Value: Golf course channel
223          RS       8    FLOW
224          RC   0.025   0.025   0.025    7853  0.0035    0.00
225          RX  100.00  140.00  175.00  260.00  350.00  415.50  445.00  475.00
226          RY  1000.0  999.00  998.00  995.00  995.00  998.00  999.00 1000.00
             *

227          KK    N04ABASIN
228          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
229          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
230          KM        MICKEN DAM
231          BA   0.199
232          LG    0.13    0.24    5.20    0.34      30
233          UI       0      78     246     447     392     229      85      37      14       0
234          UI       0       0       0       0       0       0       0       0       0       0
235          UI       0       0       0       0       0       0       0       0       0       0
236          UI       0       0       0       0       0       0       0       0       0       0
237          UI       0       0       0       0       0       0       0       0       0       0
             *

238          KK  DN04ARDIVERT
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 239          KM        Additional Retention based on 100yr 2hr retention.
 240          KM        C value is based on future land use, P=2.7, A=acres
 241          DT   RN04A     15.8      0.0
 242          DI      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 243          DQ      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 244          KK  N4AN04ROUTE
 245          KM        Cross-section:  / Manning's N Value: Golf course channel
 246          KM        Route is from N04A to CPN04
 247          RS      30    FLOW
 248          RC   0.025   0.025   0.025    7932  0.0044    0.00
 249          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
1                                          HEC-1 INPUT                                                    PAGE  7

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

 250          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
              *

 251          KK    N04BBASIN
 252          KM        BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
 253          BA   0.131
 254          LG    0.23     0.24     4.80     0.37       30
 255          UI       0      166      499      273       59       16        0        0        0        0
 256          UI       0        0        0        0        0        0        0        0        0        0
 257          UI       0        0        0        0        0        0        0        0        0        0
 258          UI       0        0        0        0        0        0        0        0        0        0
 259          UI       0        0        0        0        0        0        0        0        0        0
              *

 260          KK  DN04BRDIVERT
 261          KM        Additional Retention based on 100yr 2hr retention.
 262          KM        C value is based on future land use, P=2.7, A=acres
 263          DT   RN04B      9.9      0.0
 264          DI      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 265          DQ      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 266          KK  N4BN04ROUTE
 267          KM        Cross-section:  / Manning's N Value: Golf course channel
 268          KM        Route is from N04B to CPN04
 269          RS      45    FLOW
 270          RC   0.025   0.025   0.025    6839  0.0050    0.00
 271          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
 272          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
              *

 273          KK   CPN04COMBINE
 274          HC       5   2.968
              *

 275          KK  DN04REDIVERT
 276          KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
 277          DT    RN04     96.0      0.0
 278          DI      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 279          DQ      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 280          KK  N04N05ROUTE
 281          KM        Cross-section:  / Manning's N Value: Golf course channel
 282          RS      13    FLOW
 283          RC   0.025   0.025   0.025    5405  0.0019    0.00
 284          RX  100.00  120.00  136.00  153.00  236.00  253.00  270.00  290.00
 285          RY  1270.5 1268.50 1266.70 1265.00 1264.90 1266.70 1268.50 1270.50
              *
1                                          HEC-1 INPUT                                                    PAGE  8

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

 286          KK     N05BASIN
 287          KM        BASIN BOUNDARY FROM CORTEBELLA MASTER DRAINAGE REPORT, DEI
 288          BA   0.995
 289          LG    0.21     0.19     6.60     0.18       27
 290          UI       0       94      174      388      510      626      795     1151      988      786
 291          UI     624      502      363      200      159      108       86       30       28       29
 292          UI      29       29        0        0        0        0        0        0        0        0
 293          UI       0        0        0        0        0        0        0        0        0        0
 294          UI       0        0        0        0        0        0        0        0        0        0
              *

 295          KK  DN05REDIVERT
 296          KM        First flush volume estimated based on aerial and Preliminary Plat Final
 297          KM        Report for Corte Bella Country Club Phase II
 298          KM        Route through Corte Bella
 299          DT    RN05     15.6      0.0
 300          DI      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 301          DQ      0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 302          KK   DN07ARETRIEVE
 303          DR  DN07AS
              *

 304          KK  N7AN05ROUTE
 305          KM        Route through Corte Bella
 306          RS      16    FLOW
 307          RC   0.035   0.030   0.035   10408  0.0050    0.00
 308          RX  1000.0 1004.00 1262.00 1272.00 1282.00 1290.00 1296.00 1300.00
 309          RY  1288.0 1286.00 1286.00 1284.00 1283.90 1286.00 1286.00 1288.00
              *

 310          KK   DN07BRETRIEVE
 311          DR  DN07BS
              *

 312          KK  N7BN05ROUTE
 313          KM        Route through Corte Bella
 314          RS      21    FLOW
 315          RC   0.035   0.030   0.035    8067  0.0067    0.00
 316          RX  100.00  120.00  196.00  200.00  300.00  301.00  380.00  400.00
 317          RY  1285.0 1284.00 1281.00 1280.00 1279.90 1281.00 1284.00 1285.00
              *

 318          KK   DN07CRETRIEVE
 319          DR  DN07CS
              *

 320          KK  N7CN05ROUTE
```

```
321          KM        Route through Corte Bella
322          RS       1    FLOW
323          RC   0.035   0.030   0.035    6212  0.0050    0.00
324          RX  1000.0 1004.00 1264.00 1272.00 1282.00 1290.00 1296.00 1300.00
325          RY  1279.0 1277.00 1277.00 1275.00 1274.90 1277.00 1277.00 1279.00
             *
```



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

326          KK   CPN05COMBINE
327          HC       5   4.533
             *

328          KK  N05N06ROUTE
329          KM        Cross-section:  / Manning's N Value: clean earth, earth
330          KM        with sparse trees and shrubs, and pavement
331          RS       2    FLOW
332          RC   0.032   0.022   0.013    2139  0.0010    0.00
333          RX  100.00  250.00  306.00  326.00  338.00  360.00  414.00  415.00
334          RY  1001.0  999.50  999.00  996.00  996.10  999.00  999.50 1002.00
             *

335          KK     N06BASIN
336          KM        BASIN BOUNDARY FROM CORTE BELLA, SUN CITY WEST AND MCMICKEN DAM
337          BA   0.219
338          LG   0.25    0.25    4.40    0.45      26
339          UI      0      34     134     202     304     380     256     178      94      52
340          UI     30      10      10      11       0       0       0       0       0       0
341          UI      0       0       0       0       0       0       0       0       0       0
342          UI      0       0       0       0       0       0       0       0       0       0
343          UI      0       0       0       0       0       0       0       0       0       0
             *

344          KK  DN06REDIVERT
345          KM        Additional Retention based on 100yr 2hr retention.
346          KM        C value is based on future land use, P=2.7, A=acres
347          DT    RN06    14.3     0.0
348          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
349          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

350          KK   CPN06COMBINE
351          HC       3   4.752
             *

352          KK     N08BASIN
353          KM        BASIN BOUNDARY FROM SUN CITY WEST
354          BA   1.723
355          LG   0.21    0.23    6.20    0.21      26
356          UI      0     137     157     482     653     788     924    1129    1601    1617
357          UI   1248    1089     868     725     591     341     238     226     137     129
358          UI     42      42      42      42      42      42       0       0       0       0
359          UI      0       0       0       0       0       0       0       0       0       0
360          UI      0       0       0       0       0       0       0       0       0       0
             *

361          KK     N10BASIN
362          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
363          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
364          BA   0.638
365          LG   0.21    0.25    4.60    0.43      24
366          UI      0      82     259     433     568     882     875     636     474     314
367          UI    150     111      65      25      26      25       0       0       0       0
```



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

368          UI      0       0       0       0       0       0       0       0       0       0
369          UI      0       0       0       0       0       0       0       0       0       0
370          UI      0       0       0       0       0       0       0       0       0       0
             *

371          KK  N10N11ROUTE
372          KM        Cross-section:  / Manning's N Value: Golf course channel, Section E
373          RS       5    FLOW
374          RC   0.025   0.025   0.025    5755  0.0023    0.00
375          RX  100.00  110.00  120.00  140.00  280.00  300.00  310.00  320.00
376          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

377          KK     N11BASIN
378          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
379          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
380          BA   0.699
381          LG   0.22    0.25    5.10    0.33      25
382          UI      0      95     338     534     733    1142     888     651     464     225
383          UI    147      91      29      30      29       0       0       0       0       0
384          UI      0       0       0       0       0       0       0       0       0       0
385          UI      0       0       0       0       0       0       0       0       0       0
386          UI      0       0       0       0       0       0       0       0       0       0
             *

387          KK   CPN11COMBINE
388          HC       2   1.337
             *

389          KK  N11N09ROUTE
390          KM        Cross-section: cross section determined from aerial
391          KM        street section / Manning's N Value: Street
392          RS       3    FLOW
393          RC   0.032   0.013   0.032    9488  0.0029    0.00
394          RX  100.00  100.50  106.00  106.10  150.00  150.10  155.50  156.00
395          RY  1003.0  999.90  999.90  999.30  999.30  999.80 1000.00 1003.00
             *

396          KK     N09BASIN
397          KM        BASIN BOUNDARY FROM SUN CITY WEST
398          BA   0.877
399          LG   0.19    0.25    5.20    0.33      30
400          UI      0      87     178     377     484     616     825    1063     834     662
401          UI    517     405     241     150     120      87      33      27      27      26
402          UI     27       0       0       0       0       0       0       0       0       0
403          UI      0       0       0       0       0       0       0       0       0       0
404          UI      0       0       0       0       0       0       0       0       0       0
             *

405          KK     N14BASIN
406          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
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407          KM        MODIFIED FOR AS-BUILT CONDITIONS. APPROXIMATED ON-SITE RETENTION
408          KM        NO TOPO AVAILABLE
409          BA   0.509
410          LG    0.14     0.23     5.40     0.31       18
```



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

411          UI       0      110      399      604      993      787      512      268      134       66
412          UI      27       28        0        0        0        0        0        0        0        0
413          UI       0        0        0        0        0        0        0        0        0        0
414          UI       0        0        0        0        0        0        0        0        0        0
415          UI       0        0        0        0        0        0        0        0        0        0
             *

416          KK  DN14REDIVERT
417          KM        Hillcrest Golf Course and Lake
418          KM        No topo available
419          DT    RN14   224.8      0.0
420          DI     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
421          DQ     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

422          KK   CPN09COMBINE
423          HC       3   2.723
             *

424          KK  N09N18ROUTE
425          KM        Cross-section: Street section
426          RS       1    FLOW
427          RC   0.032   0.013   0.032    4145  0.0072    0.00
428          RX  100.00  100.50  105.00  105.50  132.50  133.00  137.50  138.00
429          RY  1004.0  999.90  999.80  999.30  999.29  999.80  999.90 1004.00
             *

430          KK     N18BASIN
431          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
432          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
433          BA   0.441
434          LG    0.24     0.25     5.40     0.27       37
435          UI       0      121      413      650      950      623      367      151       77       25
436          UI      26        0        0        0        0        0        0        0        0        0
437          UI       0        0        0        0        0        0        0        0        0        0
438          UI       0        0        0        0        0        0        0        0        0        0
439          UI       0        0        0        0        0        0        0        0        0        0
             *

440          KK   CPN18COMBINE
441          HC       2   3.164
             *

442          KK  N18N15ROUTE
443          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
444          RS       1    FLOW
445          RC   0.016   0.016   0.016    6125  0.0039    0.00
446          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
447          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
             *
```



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

448          KK     N12BASIN
449          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
450          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
451          BA   0.782
452          LG    0.17     0.15     8.40     0.10       28
453          UI       0       66       91      245      325      398      475      610      837      672
454          UI     550      460      370      297      193      115      109       67       58       20
455          UI      21       20       20       20        0        0        0        0        0        0
456          UI       0        0        0        0        0        0        0        0        0        0
457          UI       0        0        0        0        0        0        0        0        0        0
             *

458          KK  N12N13ROUTE
459          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section H
460          RS       1    FLOW
461          RC   0.016   0.016   0.016    1089  0.0055    0.00
462          RX  100.00  101.00  102.00  109.00  131.00  140.00  141.00  142.00
463          RY  1000.2 1000.10 1000.00  993.50  993.60 1000.00 1000.10 1000.20
             *

464          KK     N13BASIN
465          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
466          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
467          BA   0.724
468          LG    0.22     0.23     6.20     0.20       38
469          UI       0       58       73      211      286      342      408      500      727      654
470          UI     518      445      359      294      220      128      100       82       59       39
471          UI      18       18       18       19       18        0        0        0        0        0
472          UI       0        0        0        0        0        0        0        0        0        0
473          UI       0        0        0        0        0        0        0        0        0        0
             *

474          KK   CPN13COMBINE
475          HC       2   1.506
             *

476          KK  N13N15ROUTE
477          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
478          RS       2    FLOW
479          RC   0.016   0.016   0.016    7633  0.0039    0.00
480          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
481          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
             *

482          KK     N16BASIN
483          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
484          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
485          BA   0.285
486          LG    0.14     0.25     5.10     0.36       49
487          UI       0      109      349      628      569      331      127       55       19       20
488          UI       0        0        0        0        0        0        0        0        0        0
489          UI       0        0        0        0        0        0        0        0        0        0
490          UI       0        0        0        0        0        0        0        0        0        0
491          UI       0        0        0        0        0        0        0        0        0        0
             *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

492           KK  DN16REDIVERT
493           KM        Additional Retention based on 100yr 2hr retention.
494           KM        C value is based on future land use, P=2.7, A=acres
495           DT    RN16     10.7      0.0
496           DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
497           DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

498           KK  N16N15ROUTE
499           KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
500           RS       1    FLOW
501           RC   0.016    0.016    0.016     1241  0.0012     0.00
502           RX  100.00   101.00   102.00   112.00   150.00   160.00   161.00   162.00
503           RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
              *

504           KK     N15BASIN
505           KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
506           KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
507           BA   0.852
508           LG    0.23     0.25     5.40     0.27       37
509           UI       0      106      324      548      727     1066     1212      871      655      458
510           UI     226      164      106       35       33       32       33        0        0        0
511           UI       0        0        0        0        0        0        0        0        0        0
512           UI       0        0        0        0        0        0        0        0        0        0
513           UI       0        0        0        0        0        0        0        0        0        0
              *

514           KK   CPN15COMBINE
515           HC       4   5.807
              *

516           KK  N15N17ROUTE
517           KM        Cross-section: From Sun City West Development Master Plan
518           RS       1    FLOW
519           RC   0.016    0.016    0.016     3182  0.0031     0.00
520           RX  100.00   101.00   101.50   108.00   140.00   147.50   149.00   150.00
521           RY  1000.0   999.90   999.80   993.00   992.90   999.80   999.90 1000.00
              *

522           KK     N17BASIN
523           KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
524           KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
525           BA   1.291
526           LG    0.22     0.25     5.40     0.28       29
527           UI       0      125      245      530      691      855     1107     1555     1250      998
528           UI     790      631      417      221      198      126       79       39       38       38
529           UI      39        0        0        0        0        0        0        0        0        0
530           UI       0        0        0        0        0        0        0        0        0        0
531           UI       0        0        0        0        0        0        0        0        0        0
              *
```



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

532           KK   CPN17COMBINE
533           HC       2   7.098
              *

534           KK     N20BASIN
535           KM        BASIN BOUNDARY FROM APS YARD AND ATSF RR ALIGNMENT
536           BA   0.088
537           LG    0.12     0.25     5.40     0.31       50
538           UI       0       78      249      237       86       22        8        0        0        0
539           UI       0        0        0        0        0        0        0        0        0        0
540           UI       0        0        0        0        0        0        0        0        0        0
541           UI       0        0        0        0        0        0        0        0        0        0
542           UI       0        0        0        0        0        0        0        0        0        0
              *

543           KK  DN20REDIVERT
544           KM        Additional Retention based on 100yr 2hr retention.
545           KM        C value is based on future land use, P=2.7, A=acres
546           DT    RN20      2.2      0.0
547           DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
548           DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

549           KK  N20N21ROUTE
550           KM        Cross-section: estimated from aerial
551           KM        Manning's N Value: clean earth
552           RS       4    FLOW
553           RC   0.022    0.022    0.022     5119  0.0043     0.00
554           RX  100.00   101.00   102.00   114.00   188.00   200.00   203.00   206.00
555           RY  1000.2 1000.10 1000.00   998.00   997.90 1000.00 1000.50 1001.00
              *

556           KK     N21BASIN
557           KM        BASIN BOUNDARY FROM VASQUEZ CRT AND ATSF RR ALIGNMENT
558           BA   0.193
559           LG    0.22     0.17     6.80     0.16       35
560           UI       0       60      198      330      415      257      132       56       24       12
561           UI       0        0        0        0        0        0        0        0        0        0
562           UI       0        0        0        0        0        0        0        0        0        0
563           UI       0        0        0        0        0        0        0        0        0        0
564           UI       0        0        0        0        0        0        0        0        0        0
              *

565           KK  DN21REDIVERT
566           KM        Additional Retention based on 100yr 2hr retention.
567           KM        C value is based on future land use, P=2.7, A=acres
568           DT    RN21      0.2      0.0
569           DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
570           DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
```



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

571           KK   CPN21COMBINE
572           HC       2   0.281
              *

573           KK  DN21SEDIVERT
574           KM        Split based on ADMS for Old Town Site and 30%
```

```
575          KM        ADMP dated 7-24-07 prepared by Neals Engineering
576          DT   DN21S     0.0     0.0
577          DI     0.0   688.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
578          DQ     0.0   255.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

579          KK  N21N25ROUTE
580          KM        Cross-section: cross section based on aerial
581          KM        Manning's N Value: earth with sparse trees and shrubs
582          RS       5    FLOW
583          RC   0.032   0.032   0.032    7742  0.0057    0.00
584          RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
585          RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
             *

586          KK     N22BASIN
587          KM        BASIN BOUNDRY FROM NORTH EL MIRAGE AND NORTH SURPRISE DEV
588          BA   0.108
589          LG    0.25    0.25    6.00    0.21      31
590          UI       0      75     219     317     155      48      14       0       0       0
591          UI       0       0       0       0       0       0       0       0       0       0
592          UI       0       0       0       0       0       0       0       0       0       0
593          UI       0       0       0       0       0       0       0       0       0       0
594          UI       0       0       0       0       0       0       0       0       0       0
             *

595          KK  DN21SERETRIEVE
596          DR   DN21S
             *

597          KK  N21N22ROUTE
598          KM        Cross-section: cross section estimated from aerial
599          KM        Manning's N Value: street, clean earth
600          RS       1    FLOW
601          RC   0.022   0.013   0.022    1624  0.0062    0.00
602          RX  100.00  105.00  115.00  115.10  155.00  155.10  165.00  170.00
603          RY  1000.0  999.60  999.50  999.00  999.10  999.50  999.60 1000.00
             *

604          KK   CPN22COMBINE
605          HC       2   0.389
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

606          KK  N22N25ROUTE
607          KM        Cross-section: cross section based on aerial
608          KM        Manning's N Value: earth with sparse trees and shrubs
609          RS       4    FLOW
610          RC   0.032   0.032   0.032    6306  0.0056    0.00
611          RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
612          RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
             *

613          KK     N25BASIN
614          KM        BASIN BOUNDARY FROM THOMPSON RANCH
615          KM        BNSF RAIL YARD AND ATSF RR ALIGNMENT
616          BA   0.491
617          LG    0.17    0.25    4.15    0.58      62
618          UI       0     134     460     724    1058     694     408     168      85      29
619          UI      29       0       0       0       0       0       0       0       0       0
620          UI       0       0       0       0       0       0       0       0       0       0
621          UI       0       0       0       0       0       0       0       0       0       0
622          UI       0       0       0       0       0       0       0       0       0       0
             *

623          KK  DN25REDIVERT
624          KM        Additional Retention based on 100yr 2hr retention.
625          KM        C value is based on future land use, P=2.7, A=acres
626          DT    RN25    22.9     0.0
627          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
628          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

629          KK   CPN25COMBINE
630          HC       3    0.88
             *

631          KK  N25N26ROUTE
632          KM        Cross-section:Based on aerial and site visit
633          KM        Manning's N Value: Clean earth
634          RS       2    FLOW
635          RC   0.022   0.022   0.022    2815  0.0010    0.00
636          RX  100.00  103.00  105.00  120.00  200.00  206.00  220.00  250.00
637          RY  1116.2 1116.10 1116.00 1106.00 1105.90 1116.00 1116.50 1120.00
             *

638          KK     N26BASIN
639          KM        BASIN BOUNDARY FROM ROCK QUARY, AGUA FRIA RIVER AND ATSF RR ALIGNMENT
640          BA   0.257
641          LG    0.10    0.28    2.86    0.86      53
642          UI       0      38     145     222     322     445     310     221     134      65
643          UI      40      17      12      12       0       0       0       0       0       0
644          UI       0       0       0       0       0       0       0       0       0       0
645          UI       0       0       0       0       0       0       0       0       0       0
646          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE 17

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

647          KK  DN26REDIVERT
648          KM        Additional Retention based on 100yr 2hr retention.
649          KM        C value is based on future land use, P=2.7, A=acres
650          DT    RN26    26.0     0.0
651          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
652          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

653          KK   CPN26COMBINE
654          HC       2   1.137
             *

655          KK     N19BASIN
656          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
657          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
658          BA   0.176
```

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659          LG    0.22    0.15    9.70    0.06      40
660          UI       0     164     517     464     162      39       0       0       0       0
661          UI       0       0       0       0       0       0       0       0       0       0
662          UI       0       0       0       0       0       0       0       0       0       0
663          UI       0       0       0       0       0       0       0       0       0       0
664          UI       0       0       0       0       0       0       0       0       0       0
             *

665          KK     N23BASIN
666          KM        BASIN BOUNDARY FROM BELL RD TOWN CENTER
667          KM        NORTH SURPRISE, BELL COMMERC DEVLP
668          BA   0.517
669          LG    0.19    0.25    5.70    0.26      46
670          UI       0     156     529     863    1117     698     358     154      66      32
671          UI       0       0       0       0       0       0       0       0       0       0
672          UI       0       0       0       0       0       0       0       0       0       0
673          UI       0       0       0       0       0       0       0       0       0       0
674          UI       0       0       0       0       0       0       0       0       0       0
             *

675          KK  DN23REDIVERT
676          KM        Additional Retention based on 100yr 2hr retention.
677          KM        C value is based on future land use, P=2.7, A=acres
678          DT    RN23     9.4     0.0
679          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
680          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

681          KK  N23N24ROUTE
682          KM        Cross-section:  / Manning's N Value: Grouted rip rap bottom
683          KM        earth with sparse trees and shrubs (sideslopes)
684          RS       1    FLOW
685          RC   0.032   0.032   0.032    4874  0.0041    0.00
686          RX  100.00  143.80  154.00  162.60  181.30  201.40  228.20  229.00
687          RY  1154.0 1152.00 1150.00 1148.00 1147.90 1150.00 1152.00 1152.20
             *
```



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

688          KK     N24BASIN
689          KM        BASIN BOUNDARY FROM MOBILE HOME PARK
690          KM        3J'S COUNTRY ESTATES, ROCK QUARY AND AGUA FRIA RIVER
691          BA   0.254
692          LG    0.17    0.24    4.45    0.47      35
693          UI       0      97     311     559     509     294     112      50      18      17
694          UI       0       0       0       0       0       0       0       0       0       0
695          UI       0       0       0       0       0       0       0       0       0       0
696          UI       0       0       0       0       0       0       0       0       0       0
697          UI       0       0       0       0       0       0       0       0       0       0
             *

698          KK  DN24REDIVERT
699          KM        Additional Retention based on 100yr 2hr retention.
700          KM        C value is based on future land use, P=2.7, A=acres
701          DT    RN24    12.3     0.0
702          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
703          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

704          KK   CPN24COMBINE
705          HC       2   0.771
             *

706          KK     N27BASIN
707          KM        BASIN BOUNDARY FROM ROCK QUARY, AGUA FRIA RIVER AND ATSF RR ALIGNMENT
708          BA   0.126
709          LG    0.10    0.29    2.80    0.90      37
710          UI       0      51     159     289     247     141      52      20       9       0
711          UI       0       0       0       0       0       0       0       0       0       0
712          UI       0       0       0       0       0       0       0       0       0       0
713          UI       0       0       0       0       0       0       0       0       0       0
714          UI       0       0       0       0       0       0       0       0       0       0
             *

715          KK  DN27REDIVERT
716          KM        Additional Retention based on 100yr 2hr retention.
717          KM        C value is based on future land use, P=2.7, A=acres
718          DT    RN27    12.5     0.0
719          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
720          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

721          KK   DUMMYCOMBINE
722          HC       4
             *

723          KK   DUMMYCOMBINE
724          HC       4
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

725          KK     D03BASIN
726          KM        BASIN BOUNDARY FROM KINGSWOOD PARKE
727          BA   0.723
728          LG    0.23    0.25    4.80    0.37      35
729          UI       0     121     484     719    1140    1220     811     548     245     149
730          UI      70      36      35       0       0       0       0       0       0       0
731          UI       0       0       0       0       0       0       0       0       0       0
732          UI       0       0       0       0       0       0       0       0       0       0
733          UI       0       0       0       0       0       0       0       0       0       0
             *

734          KK  DD03REDIVERT
735          KM        Master Drainage Report Update for Kingswood Parke Phase One
736          KM        (excess retention provided for future development was
737          KM        subtracted from total retenttion provided)
738          DT    RD03    51.7     0.0
739          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
740          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

741          KK  D03D04ROUTE
742          KM        Cross-section: Cross-section determined from aerial
743          KM        Manning's N Value: street and earth with sparse trees and shrubs
744          RS       4    FLOW
```

```
745          RC   0.032   0.013   0.032    4458  0.0038    0.00
746          RX  100.00  108.00  119.00  119.10  155.00  155.10  160.00  165.00
747          RY  1000.3 1000.00  999.50  999.00  999.70 1000.20 1000.30 1000.40
             *

748          KK     D04BASIN
749          KM        BASIN BOUNDARY FROM GRAND VILLAGE NORTH/SOUTH, BELLAZANO CONDOS,
750          KM        HOPI VILLAGE, PIMA VILLAGE, SUN VILLAGE, ZUNI VILLAGE, PUEBLO VILLAGE,
751          KM        GRAND AVE PROFF PLAZA AND GRAND AVE CHANNEL
752          BA   0.891
753          LG   0.22    0.27    5.70    0.25      36
754          UI      0     122     430     681     934    1456    1132     830     591     287
755          UI    186     117      37      38      38       0       0       0       0       0
756          UI      0       0       0       0       0       0       0       0       0       0
757          UI      0       0       0       0       0       0       0       0       0       0
758          UI      0       0       0       0       0       0       0       0       0       0
             *

759          KK  DD04REDIVERT
760          KM        Master Drainage Report Update for Kingswood Parke Phase One (Sun Village
761          KM        Final Drainage Report for Grand Village Center Phase 6, Drainage Report
762          KM        Grand Point Plaza, Final Drainage Report -Revised  For Grand Pointe
763          KM        Plaza Montessori of Surprise SP06-41
764          DT    RD04    46.9     0.0
765          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
766          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
1                                        HEC-1 INPUT                                          PAGE 20

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

767          KK   CPD04COMBINE
768          HC       2   1.614
             *

769          KK  DD04SEDIVERT
770          KM        Split flow Bell Rd at Litchfield Rd intersection
771          DT   DD04S     0.0     0.0
772          DI     0.0    86.1   158.5   512.0   904.0  1940.0     0.0     0.0     0.0     0.0
773          DQ     0.0     0.0    42.4   259.0   534.0  1278.0     0.0     0.0     0.0     0.0
             *

774          KK  D04D05ROUTE
775          KM        Cross-section: Cross-section determined from aerial
776          KM        Manning's N Value: street and earth with sparse trees and shrubs
777          RS       3    FLOW
778          RC   0.032   0.013   0.013    2993  0.0027    0.00
779          RX  100.00  119.00  135.00  135.10  180.00  180.10  181.00  182.00
780          RY  1000.0  999.80  999.50  999.00  999.80 1000.30 1000.40 1000.50
             *

781          KK     D05BASIN
782          KM        BASIN BOUNDARY FROM WAL MART STORE
783          KM        SURPRISE TOWN CENTER AND GRAND AVE CHANNEL
784          BA   0.163
785          LG   0.11    0.25    4.90    0.39      73
786          UI      0     126     392     467     196      58      15       0       0       0
787          UI      0       0       0       0       0       0       0       0       0       0
788          UI      0       0       0       0       0       0       0       0       0       0
789          UI      0       0       0       0       0       0       0       0       0       0
790          UI      0       0       0       0       0       0       0       0       0       0
             *

791          KK  DD05REDIVERT
792          KM        West Point Towne Center Final Master Infrastructure Drainage Report
793          DT    RD05     8.2     0.0
794          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
795          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

796          KK   CPD05COMBINE
797          HC       2   1.777
             *

798          KK  D05D14ROUTE
799          KM        Cross-section: Cross-section determined from aerial, assumed
800          KM        3' depth / Manning's N Value: earth with grass and forbs
801          RS       2    FLOW
802          RC   0.032   0.032   0.032    3385  0.0053    0.00
803          RX  100.00  101.00  102.00  122.00  142.00  162.00  163.00  164.00
804          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
             *
1                                        HEC-1 INPUT                                          PAGE 21

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

805          KK   DD141DIVERT
806          KM
807          DT  DD141S     0.0     0.0
808          DI     0.0   122.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0
809          DQ     0.0     0.0   378.0   878.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

810          KK  D05D15ROUTE
811          KM        Cross-section: Cross-section determined from aerial, assumed
812          KM        3' depth  / Manning's N Value: concrete
813          RS       3    FLOW
814          RC   0.016   0.016   0.016    4588  0.0044    0.00
815          RX  100.00  101.00  102.00  127.00  131.00  140.00  141.00  142.00
816          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
             *

817          KK     D11BASIN
818          KM        BASIN BOUNDARY FROM ORCHIDS DEVELOPMENT
819          KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
820          BA   0.662
821          LG   0.24    0.25    5.60    0.26      38
822          UI      0      84     256     432     569     864     927     669     505     345
823          UI    173     121      81      25      26      26       0       0       0       0
824          UI      0       0       0       0       0       0       0       0       0       0
825          UI      0       0       0       0       0       0       0       0       0       0
826          UI      0       0       0       0       0       0       0       0       0       0
             *

827          KK  DD11REDIVERT
828          KM        Final Drainage Report for Parkway Bank, Drainage Report for Deer Valley
829          KM        Credit Union Final Drainage Report for Jiffy Lube at Bell and Reems
830          KM        for The Orchard Estates Apartments, Drainage Report
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831          KM        for Mountainside Fitness Center Lot 7 a
832          DT    RD11     35.6      0.0
833          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
834          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

835          KK   DD111DIVERT
836          KM        Greenway at Parkview intersection split flow
837          DT  DD111S      0.0      0.0
838          DI     0.0     33.8    453.4  1486.3  2998.5      0.0      0.0      0.0      0.0      0.0
839          DQ     0.0     25.6    376.5  1210.3  2419.3      0.0      0.0      0.0      0.0      0.0
             *

840          KK   DD112DIVERT
841          KM        Greenway at Parkview intersection split flow
842          DT  DD112S      0.0      0.0
843          DI     0.0      8.2     77.0   276.0   579.1      0.0      0.0      0.0      0.0      0.0
844          DQ     0.0      5.4     35.1    78.9   133.0      0.0      0.0      0.0      0.0      0.0
             *
1                                        HEC-1 INPUT                                                    PAGE 22

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

845          KK  D11D12ROUTE
846          KM        Cross-section: Cross-section determined from aerial
847          KM        Manning's N Value: clean earth; straight
848          RS       3    FLOW
849          RC   0.022    0.022    0.022     2668  0.0037     0.00
850          RX  100.00   124.00   154.00   155.00  156.00   157.00   158.00   159.00
851          RY  1208.0 1203.00 1208.00 1208.10 1208.20 1208.30 1208.40 1208.50
             *

852          KK     D12BASIN
853          KM        BASIN BOUNDARY FROM ORCHIDS PARK
854          KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
855          BA   0.347
856          LG    0.14     0.25     5.80     0.26       47
857          UI       0       44      132      225      298      443      490      352      265      184
858          UI      93       65       42       14       13       13       14        0        0        0
859          UI       0        0        0        0        0        0        0        0        0        0
860          UI       0        0        0        0        0        0        0        0        0        0
861          UI       0        0        0        0        0        0        0        0        0        0
             *

862          KK  DD12REDIVERT
863          KM        Final Drainage Report for Residence Inn by Marriot
864          KM        Final Drainage Report for The Orchards Parcel 5
865          KM        (Includes Parcels 9,11,12 and 1/2 of 8), Final Drainage Report for
866          KM        Stadium Village (South) Residences
867          KM        Final Drainage Report for Stadium Village Residences
868          DT    RD12     25.6      0.0
869          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
870          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

871          KK   CPD12COMBINE
872          HC       2   1.009
             *

873          KK   DD121DIVERT
874          KM        Greenway at Bullard intersection split flow
875          DT  DD121S      0.0      0.0
876          DI     0.0     68.7    371.0  1186.5  2407.4      0.0      0.0      0.0      0.0      0.0
877          DQ     0.0     19.7    166.4   705.0  1553.4      0.0      0.0      0.0      0.0      0.0
             *

878          KK   DD122DIVERT
879          KM        Greenway at Bullard intersection split flow
880          DT  DD122S      0.0      0.0
881          DI     0.0     48.9    204.6   481.5   854.0      0.0      0.0      0.0      0.0      0.0
882          DQ     0.0     24.3     82.0   159.0   251.4      0.0      0.0      0.0      0.0      0.0
             *
1                                        HEC-1 INPUT                                                    PAGE 23

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

883          KK  D12D13ROUTE
884          KM        Cross-section: determined from aerial and contours
885          KM        Manning's N Value: earth with sparse trees and shrubs for left
886          KM        overbank and main channel, right overbank is pavement
887          RS      12    FLOW
888          RC   0.032    0.032    0.013     5345  0.0031     0.00
889          RX  100.00   100.10   100.20   155.00  198.00   205.00   215.00   220.00
890          RY  1000.2 1000.10 1000.00   998.00  998.40   998.50   998.60   998.70
             *

891          KK     D13BASIN
892          KM        BASIN BOUNDARY FROM GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
893          BA   1.030
894          LG    0.10     0.25     4.90     0.41       36
895          UI       0      158      631      953     1429     1790     1199      841      439      244
896          UI     141       48       48       48        0        0        0        0        0        0
897          UI       0        0        0        0        0        0        0        0        0        0
898          UI       0        0        0        0        0        0        0        0        0        0
899          UI       0        0        0        0        0        0        0        0        0        0
             *

900          KK  DD13REDIVERT
901          KM        Final Drainage Report for Surprise Festival, Final Drainage Report
902          KM        for The City at Surprise Office Building, Final Drainage Report for
903          KM        Surprise Tennis Center, Final Drainage Report for City of Surprise
904          KM        Central Utility Plant, Final Drainage Report for Hear
905          DT    RD13    103.4      0.0
906          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
907          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

908          KK  DD04SERETRIEVE
909          DR   DD04S
             *

910          KK  D04D13ROUTE
911          KM        Cross-section: Cross-section determined from aerial
912          KM        Manning's N Value: Natural desert wash, sheet flow
913          RS      13    FLOW
914          RC   0.040    0.040    0.040     5483  0.0031     0.00
915          RX  100.00   101.00   102.00   150.00  155.00   700.00   710.00   720.00
916          RY  1000.0   999.90   999.80   997.80  997.90   999.80   999.90 1000.00
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                *

917             KK   CPD13COMBINE
918             HC       3   3.653
                *

919             KK   DD131DIVERT
920             KM        Greenway at Litchfield intersection split flow
921             DT  DD131S      0.0      0.0
922             DI     0.0    519.2    917.3   1650.7   2842.4      0.0      0.0      0.0      0.0      0.0
923             DQ     0.0     18.8    121.1    423.4    996.3      0.0      0.0      0.0      0.0      0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

924             KK   DD132DIVERT
925             KM        Greenway at Litchfield intersection split flow
926             DT  DD132S      0.0      0.0
927             DI     0.0    500.4    796.2   1227.2   1846.1      0.0      0.0      0.0      0.0      0.0
928             DQ     0.0    112.4    318.0    584.2    899.4      0.0      0.0      0.0      0.0      0.0
                *

929             KK  D13D14ROUTE
930             KM        Cross-section: Cross-section determined from FCDMC 69
931             KM        Manning's N Value: earth with grass and forbs
932             RS       6    FLOW
933             RC   0.025   0.025   0.025    5304  0.0015    0.00
934             RX  100.00  120.00  122.40  140.40  158.40  176.40  176.80  196.80
935             RY  1175.5 1175.40 1175.00 1172.00 1171.90 1175.00 1175.40 1175.50
                *

936             KK     D14BASIN
937             KM        BASIN BOUNDARY FROM WEST POINT DEVELOPMENT AND GRANDE AVE CHANNEL
938             BA   0.942
939             LG    0.23    0.25    5.10    0.32      43
940             UI       0     114     330     577     752    1087    1356     973     755     543
941             UI     302     194     122      65      36      35      35       0       0       0
942             UI       0       0       0       0       0       0       0       0       0       0
943             UI       0       0       0       0       0       0       0       0       0       0
944             UI       0       0       0       0       0       0       0       0       0       0
                *

945             KK  DD14REDIVERT
946             KM        West Point Towne Center Final Master Infrastructure Drainage Report
947             DT    RD14    81.6     0.0
948             DI     0.0   500.0  5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
949             DQ     0.0   500.0  5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
                *

950             KK   DD141RETRIEVE
951             DR  DD141S
                *

952             KK  D0514AROUTE
953             KM        Cross-section: Cross-section determined from aerial
954             KM        Manning's N Value: street and ROW
955             KM        Route is from DD141 diversion to CPD14
956             RS       3    FLOW
957             RC   0.032   0.013   0.032    3147  0.0051    0.00
958             RX  100.00  120.00  140.00  140.10  200.00  200.10  220.00  240.00
959             RY  1000.0  999.50 1000.00  999.50  999.50 1000.00  999.50 1000.00
                *

960             KK   CPD14COMBINE
961             HC       3   4.758
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

962             KK   SRD14STORAGE
963             KM        Storage in basin at Greenway and Dysart
964             KM        Volume estimated from topo
965             KO
966             RS       1    STOR
967             SV            0.30    4.10   17.00   40.40   95.20
968             SQ           23.60   83.80  162.00  645.50 2369.50
969             SE  1164.0 1165.00 1166.00 1167.00 1168.00 1169.00
970             ST
                *

971             KK   DD142DIVERT
972             KM        Greenway at Dysart intersection split flow
973             DT  DD142S      0.0      0.0
974             DI     0.0    295.5    693.0   1325.3   2531.5      0.0      0.0      0.0      0.0      0.0
975             DQ     0.0    269.3    457.1    770.3   1405.9      0.0      0.0      0.0      0.0      0.0
                *

976             KK  D14D15ROUTE
977             KM        Cross section: Cross-section determined from  aerial, 1/2 street section
978             KM        Manning's N Value: street, clean earth
979             RS       4    FLOW
980             RC   0.022   0.013   0.013    3351  0.0029    0.00
981             RX  100.00  100.10  110.00  110.10  120.00  125.00  133.90  134.00
982             RY  1003.0  999.80  999.70  999.20  999.40  999.50  999.70 1000.50
                *

983             KK     D15BASIN
984             KM        BASIN BOUNDARY FROM SUCCESS SCHOOL
985             BA   0.220
986             LG    0.19    0.15    7.00    0.15      54
987             UI       0     100     309     559     405     208      75      26      16       0
988             UI       0       0       0       0       0       0       0       0       0       0
989             UI       0       0       0       0       0       0       0       0       0       0
990             UI       0       0       0       0       0       0       0       0       0       0
991             UI       0       0       0       0       0       0       0       0       0       0
                *

992             KK  DD15REDIVERT
993             KM        Additional Retention based on 100yr 2hr retention.
994             KM        C value is based on future land use, P=2.7, A=acres
995             DT    RD15     0.6     0.0
996             DI     0.0   500.0  5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
997             DQ     0.0   500.0  5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
                *

998             KK   CPD15COMBINE
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 999          HC       3   4.978
              *
1                                        HEC-1 INPUT                                                    PAGE 26

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

1000          KK  D15D26ROUTE
1001          KM        Cross-section: Concrete channel along Grand Ave, assumed slope
1002          KM        2:1 slide slopes, width and geometry based on aerial
1003          RS       3    FLOW
1004          RC  0.016   0.016   0.016    9949  0.0050    0.00
1005          RX 100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
1006          RY 1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.20 1040.60
              *

1007          KK  D15D28ROUTE
1008          KM        Channel along Grand Avenue
1009          KM        Flow in basin D26 does not enter channel
1010          RS       2    FLOW
1011          RC  0.016   0.016   0.016    7000  0.0050    0.00
1012          RX 100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
1013          RY 1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.20 1040.60
              *

1014          KK     D28BASIN
1015          KM        BASIN BOUNDARY FROM EL MIRAGE TR 1-3 AND GRAND AVE CHANNEL
1016          BA   0.255
1017          LG   0.21    0.25    4.50    0.44      38
1018          UI      0     121     375     665     462     221      83      25      19       0
1019          UI      0       0       0       0       0       0       0       0       0       0
1020          UI      0       0       0       0       0       0       0       0       0       0
1021          UI      0       0       0       0       0       0       0       0       0       0
1022          UI      0       0       0       0       0       0       0       0       0       0
              *

1023          KK  DD28REDIVERT
1024          KM        Additional Retention based on 100yr 2hr retention.
1025          KM        C value is based on future land use, P=2.7, A=acres
1026          DT    RD28     0.8     0.0
1027          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1028          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1029          KK   CPD28COMBINE
1030          HC       2   5.233
              *

1031          KK  D28AFRROUTE
1032          KM        Direct discharge into Agua Fria River, field verified by FCDMC
1033          RS       1    FLOW
1034          RC  0.016   0.016   0.016    2990  0.0050    0.00
1035          RX 100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
1036          RY 1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.20 1040.60
              *
1                                        HEC-1 INPUT                                                    PAGE 27

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

1037          KK     D26BASIN
1038          KM        BASIN BOUNDARY FROM RACHO EL MIRAGE, SCHOOL
1039          KM        MOBILE HOME PARK, SUNWEST CEMETARY AND GRAND AVE CHANNEL
1040          BA   0.642
1041          LG   0.21    0.24    5.80    0.24      39
1042          UI      0     256     801    1469    1252     726     272     111      45       0
1043          UI      0       0       0       0       0       0       0       0       0       0
1044          UI      0       0       0       0       0       0       0       0       0       0
1045          UI      0       0       0       0       0       0       0       0       0       0
1046          UI      0       0       0       0       0       0       0       0       0       0
              *

1047          KK  DD26REDIVERT
1048          KM        Retention volume estimated based on aerial
1049          DT    RD26    60.5     0.0
1050          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1051          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1052          KK   DD142RETRIEVE
1053          DR  DD142S
              *

1054          KK  D14D26ROUTE
1055          KM        Cross-section: Cross-section from Lower El Mirage Channelization
1056          KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
1057          RS       3    FLOW
1058          RC  0.022   0.022   0.022    5050  0.0048    0.00
1059          RX 100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
1060          RY 1000.0  999.50  999.00  991.00  991.10  999.00  999.80 1000.00
              *

1061          KK   CPD26COMBINE
1062          HC       2     5.4
              *

1063          KK  D26D27ROUTE
1064          KM        Cross-section: Cross-section determined from FCDMC 18
1065          KM        Manning's N Value: Clean earth
1066          RS       2    FLOW
1067          RC  0.022   0.022   0.022    2050  0.0039    0.00
1068          RX 100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
1069          RY 1000.0  999.50  999.00  991.00  991.00  999.00  999.50 1000.00
              *

1070          KK     D27BASIN
1071          KM        BASIN BOUNDARY FROM RANCHO EL MIRAGE
1072          KM        WEST EL MIRAGE AND BNSF RR ALIGNMENT
1073          BA   0.316
1074          LG   0.20    0.24    4.90    0.35      42
1075          UI      0     101     334     573     674     411     197      89      33      20
1076          UI      0       0       0       0       0       0       0       0       0       0
1077          UI      0       0       0       0       0       0       0       0       0       0
1078          UI      0       0       0       0       0       0       0       0       0       0
1                                        HEC-1 INPUT                                                    PAGE 28

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

1079          UI      0       0       0       0       0       0       0       0       0       0
              *
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1080          KK  DD27REDIVERT
1081          KM        Retention volume estimated based on aerial
1082          DT    RD27      8.2      0.0
1083          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1084          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1085          KK   CPD27COMBINE
1086          HC       2    5.716
              *

1087          KK   SRD27STORAGE
1088          KM        Storage at culvert under TB Road
1089          KO
1090          RS       1     STOR
1091          SV                                                          22.80    51.41
1092          SQ          52.00   202.00   415.00   658.00   906.00  1127.00  2999.00
1093          SE  1140.0 1142.00 1144.00 1146.00 1148.00 1150.00 1152.00 1154.00
1094          ST
              *

1095          KK  D27D42ROUTE
1096          KM        Cross-section: Cross-section determined from
1097          KM        Waddell Road Drainage Improvement CAR Final
1098          KM        by HDR dated April 10, 2009, RLE2
1099          RS       5     FLOW
1100          RC   0.030    0.030    0.030     5599  0.0020     0.00
1101          RX    0.00    24.40    34.40    44.40    54.40    64.40    74.40    98.80
1102          RY  1128.5 1122.40 1122.40 1122.40 1122.40 1122.40 1122.40 1128.50
              *

1103          KK     D20BASIN
1104          KM        BASIN BOUNDARY FROM COUNTRYSIDE UNITS 1-4 AND COTTON GIN
1105          BA   0.498
1106          LG    0.25     0.25     4.65     0.39       32
1107          UI       0       67      234      367      503      791      641      472      341      178
1108          UI     111       68       25       20       21        0        0        0        0        0
1109          UI       0        0        0        0        0        0        0        0        0        0
1110          UI       0        0        0        0        0        0        0        0        0        0
1111          UI       0        0        0        0        0        0        0        0        0        0
              *

1112          KK  DD20REDIVERT
1113          KM        Final Drainage Report Greenway Marketplace Wal-mart Neighborhood
1114          KM        Market #4218-00, Drainage Report for Countryside Elementary School, Ash
1115          KM        Ranch Water Supply Facility Expansion, Countryside - Preliminary Drainag
1116          KM        Report, Final Drainage Report for Cotton Gin
1117          DT    RD20     41.6      0.0
1118          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1119          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1120          KK   DD111RETRIEVE
1121          DR  DD111S
              *

1122          KK  D11D20ROUTE
1123          KM        Cross-section: Cross-section determined from aerial
1124          KM        Manning's N Value: retention basins, earth w/ grass
1125          RS       5     FLOW
1126          RC   0.025    0.025    0.025     6256  0.0032     0.00
1127          RX  100.00   101.00   102.00   114.00   190.00   202.00   203.00   204.00
1128          RY  1000.2 1000.10 1000.00   997.00   996.90 1000.00 1000.10 1000.20
              *

1129          KK   CPD20COMBINE
1130          HC       2     1.16
              *

1131          KK  D20D21ROUTE
1132          KM        Cross-section:  / Manning's N Value: street and earth with sparse
1133          KM        trees and shrubs
1134          RS       6     FLOW
1135          RC   0.032    0.032    0.013     5323  0.0023     0.00
1136          RX  100.00   100.50   112.00   150.00   162.00   198.00   198.00   220.00
1137          RY  1000.1 1000.00   997.00   997.00 1000.00   999.50   998.90   999.40
              *

1138          KK     D21BASIN
1139          KM        BASIN BOUNDARY FROM ASHTON RANCH MULTI UNITS
1140          BA   0.496
1141          LG    0.25     0.25     4.65     0.39       32
1142          UI       0       63      199      330      436      672      687      496      370      250
1143          UI     123       87       55       19       20       19        0        0        0        0
1144          UI       0        0        0        0        0        0        0        0        0        0
1145          UI       0        0        0        0        0        0        0        0        0        0
1146          UI       0        0        0        0        0        0        0        0        0        0
              *

1147          KK  DD21REDIVERT
1148          KM        Final Drainage Report for Ashton Ranch Unit 3, Final Drainage Report for
1149          KM        Ashton Ranch Unit 1, Final Drainage Report for Ashton Ranch Unit 2, Fina
1150          KM        Drainage Report for Ashton Ranch Unit 4
1151          DT    RD21     39.9      0.0
1152          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1153          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1154          KK   DD112RETRIEVE
1155          DR  DD112S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1156          KK  D11D21ROUTE
1157          KM        Cross-section: determined from aerial, street section through subdivisio
1158          KM        Manning's N Value: street, earth with sparse trees and shrubs
1159          RS      11     FLOW
1160          RC   0.032    0.013    0.032     8031  0.0035     0.00
1161          RX  100.00   106.00   115.00   115.10   167.00   167.10   174.00   179.00
1162          RY  1000.0   999.80   999.50   999.00   998.90   999.50   999.80 1000.00
              *
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1163          KK   DD121RETRIEVE
1164          DR  DD121S
              *

1165          KK  D12D21ROUTE
1166          KM        Cross-section: Cross-section determined from aerial
1167          KM        Manning's N Value: street and earth with sparse trees and shrubs
1168          RS       2    FLOW
1169          RC   0.013   0.013   0.032    2810  0.0078    0.00
1170          RX  100.00  105.00  110.00  115.00  140.00  140.10  176.00  177.00
1171          RY  1000.0  999.90  999.80  999.70  999.20  999.70  999.80 1000.00
              *

1172          KK   CPD21COMBINE
1173          HC       4   2.003
              *

1174          KK   DD211DIVERT
1175          KM        Waddell at Bullard split flow
1176          DT  DD211S     0.0     0.0
1177          DI     0.0   184.9   770.2  1884.9  3510.6     0.0     0.0     0.0     0.0     0.0
1178          DQ     0.0   139.4   462.9  1049.1  1871.4     0.0     0.0     0.0     0.0     0.0
              *

1179          KK   DD212DIVERT
1180          KM        Waddell at Bullard split flow
1181          DT  DD212S     0.0     0.0
1182          DI     0.0    45.5   307.3   835.8  1639.2     0.0     0.0     0.0     0.0     0.0
1183          DQ     0.0    36.2   111.1   209.5   326.8     0.0     0.0     0.0     0.0     0.0
              *

1184          KK  D21D22ROUTE
1185          KM        Cross-section: Cross-section determined from aerial
1186          KM        Manning's N Value: earth with grass and forbs (main channel)
1187          KM        earth with sparse trees and shrubs (overbanks)
1188          RS       5    FLOW
1189          RC   0.032   0.025   0.032    2720  0.0029    0.00
1190          RX  100.00  103.00  105.00  116.00  151.00  160.00  165.00  170.00
1191          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1192          KK     D22BASIN
1193          KM        BASIN BOUNDARY FROM ROYAL RANCH UNIT I AND II
1194          BA   0.454
1195          LG    0.24    0.25    4.70    0.37      32
1196          UI       0      63     233     357     500     764     567     411     284     135
1197          UI      87      50      20      20      20       0       0       0       0       0
1198          UI       0       0       0       0       0       0       0       0       0       0
1199          UI       0       0       0       0       0       0       0       0       0       0
1200          UI       0       0       0       0       0       0       0       0       0       0
              *

1201          KK  DD22REDIVERT
1202          KM        Drainage Report for Royal Ranch Unit 2 (Basins P1&N in D23), Final Drain
1203          KM        Report for Royal Ranch Unit 2, Parcel 5, Final Drainage Report for Royal
1204          KM        Unit 2 Parcel 8, portion estimated by aerial for Del Webb
1205          DT    RD22    37.5     0.0
1206          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1207          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1208          KK   DD122RETRIEVE
1209          DR  DD122S
              *

1210          KK  D12D22ROUTE
1211          KM        Cross-section: Cross section determined from aerial
1212          KM        Manning's N Value: street and earth with sparse trees and shrubs
1213          RS       7    FLOW
1214          RC   0.032   0.013   0.013    7744  0.0040    0.00
1215          RX  100.00  105.00  145.00  145.10  160.00  174.00  178.00  180.00
1216          RY  1000.0  999.90  999.50  999.00  999.20  999.50  999.60  999.70
              *

1217          KK   CPD22COMBINE
1218          HC       3   2.457
              *

1219          KK  D22D23ROUTE
1220          KM        Cross-section: Cross-section determined from aerial
1221          KM        Manning's N Value: earth with sparse trees and shrubs/ riprap
1222          RS       3    FLOW
1223          RC   0.032   0.032   0.032    2705  0.0037    0.00
1224          RX  100.00  104.00  106.00  110.00  118.00  122.00  126.00  138.00
1225          RY  1161.0 1160.00 1159.00 1158.00 1158.10 1159.00 1160.00 1161.00
              *

1226          KK     D23BASIN
1227          KM        BASIN BOUNDARY FROM SIERRA VERDE
1228          BA   0.541
1229          LG    0.21    0.25    5.00    0.34      34
1230          UI       0      70     229     376     498     786     729     530     393     249
1231          UI     121      87      48      21      22      21       0       0       0       0
1232          UI       0       0       0       0       0       0       0       0       0       0
1233          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1234          UI       0       0       0       0       0       0       0       0       0       0
              *

1235          KK  DD23REDIVERT
1236          KM        Final Drainage Report for Sierra Verde Parcel 5, Infrastructure Drainage
1237          KM        Sierra Verde (temporary basins removed), Final Drainage Report for Sierr
1238          KM        Final Drainage Report for Harmony Apartments, Drainage Report for Royal
1239          KM        Final Drainage Report for Sierra Verde Parcel 9, Final Drainage Report f
1240          KM        Parcel 3, Final Drainage Report for Sierra Verde Parcel 2, Final Drainag
1241          KM        Sierra Verde Parcel 1, Drainage Report for Fry's at Waddell and Litchfie
1242          DT    RD23    49.6     0.0
1243          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1244          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1245          KK   DD131RETRIEVE
1246          DR  DD131S
```

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                *
1247            KK  D13D23ROUTE
1248            KM        Cross-section: Cross-section determined from aerial 1/2 street section
1249            KM        Manning's N Value: street, earth with sparse trees and shrubs
1250            RS       7    FLOW
1251            RC  0.032   0.013   0.032    5460  0.0044    0.00
1252            RX 100.00  100.00  109.00  109.00  148.00  148.00  197.00  198.00
1253            RY 1180.0 1176.30 1176.30 1175.80 1175.00 1175.50 1177.00 1177.10
                *

1254            KK   CPD23COMBINE
1255            HC       3   5.642
                *

1256            KK   DD231DIVERT
1257            KM        Waddell at Litchfield split flow
1258            DT  DD231S     0.0     0.0
1259            DI     0.0   518.8   867.4  1680.6  2985.0     0.0     0.0     0.0     0.0     0.0
1260            DQ     0.0    51.3   223.2   727.6  1503.5     0.0     0.0     0.0     0.0     0.0
                *

1261            KK   DD232DIVERT
1262            KM        Waddell at Litchfield split flow
1263            DT  DD232S     0.0     0.0
1264            DI     0.0   467.5   644.1   953.0  1481.6     0.0     0.0     0.0     0.0     0.0
1265            DQ     0.0    55.8   138.4   242.9   365.2     0.0     0.0     0.0     0.0     0.0
                *

1266            KK  D23D24ROUTE
1267            KM        Cross-section: Cross-section determined from
1268            KM        Waddell Road Drainage Improvement CAR Final
1269            KM        by HDR dated April 10, 2009, R137
1270            RS       8    FLOW
1271            RC  0.035   0.035   0.035    2646  0.0044    0.00
1272            RX 894.00  906.00  912.00  918.00  926.00  930.00  934.00  942.00
1273            RY 1157.0 1155.00 1154.00 1153.00 1153.00 1154.00 1155.00 1157.00
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1274            KK     D24BASIN
1275            KM        BASIN BOUNDARY FROM LITCHFIELD MANOR
1276            BA   0.492
1277            LG    0.27    0.25    5.10    0.31      28
1278            UI       0      56     145     267     346     467     677     539     421     315
1279            UI     227     116      89      56      26      17      17      17       0       0
1280            UI       0       0       0       0       0       0       0       0       0       0
1281            UI       0       0       0       0       0       0       0       0       0       0
1282            UI       0       0       0       0       0       0       0       0       0       0
                *

1283            KK  DD24REDIVERT
1284            KM        Final Drainage Report for Litchfield Manor (excess retention per report)
1285            DT    RD24    40.9     0.0
1286            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1287            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1288            KK   DD132RETRIEVE
1289            DR  DD132S
                *

1290            KK  D13D24ROUTE
1291            KM        Cross-section: Cross-section determined from aerial 1/2 street section
1292            KM        Manning's N Value: street, earth with sparse trees and shrubs
1293            RS       5    FLOW
1294            RC  0.032   0.013   0.013    5460  0.0044    0.00
1295            RX 100.00  100.10  145.00  145.10  175.00  175.10  184.90  185.00
1296            RY 1178.0 1176.50 1175.50 1175.00 1175.80 1176.30 1176.30 1180.00
                *

1297            KK   CPD24COMBINE
1298            HC       3   6.134
                *

1299            KK  D24D25ROUTE
1300            KM        Cross-section: Cross-section determined from Waddell
1301            KM        Road Drainage Improvement CAR Final by HDR dated April 10, 2009, R138
1302            RS       4    FLOW
1303            RC  0.030   0.030   0.030    2701  0.0020    0.00
1304            RX 1000.0 1018.00 1019.00 1020.00 1026.00 1027.00 1028.00 1046.00
1305            RY 1100.0 1094.00 1094.00 1094.00 1094.00 1094.00 1094.00 1100.00
                *

1306            KK     D25BASIN
1307            KM        BASIN BOUNDARY FROM ROSEVIEW MULTI PHASE
1308            BA   0.497
1309            LG    0.25    0.25    4.80    0.35      30
1310            UI       0      63     200     335     439     678     685     499     371     247
1311            UI     120      87      53      19      20      19       0       0       0       0
1312            UI       0       0       0       0       0       0       0       0       0       0
1313            UI       0       0       0       0       0       0       0       0       0       0
1314            UI       0       0       0       0       0       0       0       0       0       0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1315            KK  DD25REDIVERT
1316            KM        Drainage Report for Roseview - Parcels 1-6, Master Drainage
1317            KM        Report for Roseview, Retention for Parcels 7 and 8 were estimated
1318            KM        based on aerial, Parcel 5a has no retention
1319            DT    RD25    37.1     0.0
1320            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1321            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1322            KK   CPD25COMBINE
1323            HC       2   6.631
                *

1324            KK  D25D39ROUTE
1325            KM        Cross-section: Cross-section determined from
1326            KM        Waddell  Road Drainage Improvement CAR Final by
1327            KM        by HDR dated April 10, 2009, RLLE
1328            RS       2    FLOW
```

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1329          RC   0.030   0.030   0.030    2020  0.0040    0.00
1330          RX    0.00   20.00   25.00   30.00   35.00   41.50   51.10   82.30
1331          RY   10.00    0.00    0.00    0.00    0.00    0.00    4.80   10.00
              *

1332          KK     D39BASIN
1333          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
1334          BA   0.182
1335          LG    0.10    0.25    5.60    0.31      40
1336          UI       0     178     574     460     148      34       0       0       0       0
1337          UI       0       0       0       0       0       0       0       0       0       0
1338          UI       0       0       0       0       0       0       0       0       0       0
1339          UI       0       0       0       0       0       0       0       0       0       0
1340          UI       0       0       0       0       0       0       0       0       0       0
              *

1341          KK  DD39REDIVERT
1342          KM        Additional Retention based on 100yr 2hr retention.
1343          KM        C value is based on future land use, P=2.7, A=acres
1344          DT    RD39    19.9     0.0
1345          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1346          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1347          KK   CPD39COMBINE
1348          HC       2   6.813
              *

1349          KK  D39D42ROUTE
1350          KM        Cross-section: Cross-section determined from
1351          KM        Waddell Road Drainage Improvement CAR Final
1352          KM        by HDR dated April 10, 2009, RLLE1
1353          RS      10    FLOW
1354          RC   0.030   0.030   0.030    5691  0.0039    0.00
1355          RX    0.00   30.00   38.00   54.00   76.50  104.00  139.00  154.00
1356          RY   10.00    4.00    4.00    0.00    0.00    0.00    7.00   10.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1357          KK     D42BASIN
1358          KM        BASIN BOUNDARY FROM PARQUE VERDE MULTI PHASE
1359          KM        DYSART SCHOOL DISTRICT, AND BUENA VISTA
1360          BA   0.994
1361          LG    0.23    0.24    5.20    0.30      35
1362          UI       0     154     637     944    1472    1702    1142     782     387     222
1363          UI     118      47      48       0       0       0       0       0       0       0
1364          UI       0       0       0       0       0       0       0       0       0       0
1365          UI       0       0       0       0       0       0       0       0       0       0
1366          UI       0       0       0       0       0       0       0       0       0       0
              *

1367          KK  DD42REDIVERT
1368          KM        Retention volume estimated based on aerial, Cactus and Dysart
1369          KM        Subdivision and Parque Verde - No Reports available
1370          DT    RD42    76.2     0.0
1371          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1372          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1373          KK   CPD42COMBINE
1374          HC       3    9.87
              *

1375          KK   SRD42STORAGE
1376          KM        Waddell CAR West Cactus Basin
1377          KO
1378          RS       1    STOR
1379          SV             0.64    4.60   17.30   27.60   56.30
1380          SQ                    139.00  426.00  827.00 1295.00
1381          SE  1105.3 1108.00 1110.00 1112.00 1114.00 1116.00
1382          ST
              *

1383          KK  D42D53ROUTE
1384          KM        Cross-section: Cross-section determined from
1385          KM        Waddell Road Drainage Improvement CAR Final
1386          KM        by HDR dated April 10, 2009, RLE3
1387          RS       3    FLOW
1388          RC   0.030   0.030   0.030    1558  0.0020    0.00
1389          RX    0.00   10.00   22.00   97.00  171.00  172.00  184.00  194.00
1390          RY    3.50    3.00    0.00    0.00    0.00    0.00    3.00    3.50
              *

1391          KK     D53BASIN
1392          KM        BASIN BOUNDARY FROM EL MIRAGE MARKET PLACE, RANCHO MIRAGE UNIT 3
1393          BA   0.118
1394          LG    0.14    0.25    4.60    0.47      27
1395          UI       0      65     191     329     203      81      29       9       0       0
1396          UI       0       0       0       0       0       0       0       0       0       0
1397          UI       0       0       0       0       0       0       0       0       0       0
1398          UI       0       0       0       0       0       0       0       0       0       0
1399          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1400          KK  DD53REDIVERT
1401          KM        Retention volume estimated based on aerial
1402          DT    RD53    14.4     0.0
1403          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1404          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1405          KK   CPD53COMBINE
1406          HC       2   9.988
              *

1407          KK   SRD53STORAGE
1408          KM        West Cactus Basin
1409          KO
1410          RS       1    STOR
1411          SV             5.72   11.59   18.17   32.01   39.46   67.53   67.53   67.53   67.53
1412          SQ                                                            546.00  731.00  890.00
1413          SE  1098.5 1099.50 1100.50 1101.50 1103.50 1104.50 1108.50 1111.00 1112.00 1113.00
1414          ST
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                *
1415            KK  D53D54ROUTE
1416            KM        Cross-section: Cross-section determined from
1417            KM        Waddell Road Drainage Improvement CAR Final
1418            KM        by HDR dated April 10, 2009, RLE4
1419            RS       8    FLOW
1420            RC   0.030   0.030   0.030    3999  0.0038    0.00
1421            RX    0.00   36.00   39.00   42.00   45.00   48.00   51.00   87.00
1422            RY  1102.8 1096.80 1096.80 1096.80 1096.80 1096.80 1096.80 1102.80
                *

1423            KK     D43BASIN
1424            KM        BASIN BOUNDARY FROM MONTA BLANCA ESTATES, SUNNYVALE AND SUNDIAL
1425            BA   0.500
1426            LG    0.24    0.25    4.70    0.37      36
1427            UI       0      75     299     448     669     867     596     410     233     124
1428            UI      75      23      23      23       0       0       0       0       0       0
1429            UI       0       0       0       0       0       0       0       0       0       0
1430            UI       0       0       0       0       0       0       0       0       0       0
1431            UI       0       0       0       0       0       0       0       0       0       0
                *

1432            KK  DD43REDIVERT
1433            KM        Retention volume estimated based on aerial
1434            DT    RD43    38.6     0.0
1435            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1436            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                        HEC-1 INPUT                                          PAGE 37

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

1437            KK  D43D54ROUTE
1438            KM        Cross-section: golf course, assumed 0.5%
1439            KM        side slopes, V-ditch / Manning's N Value: grass - golf course
1440            RS      16    FLOW
1441            RC   0.025   0.025   0.025    3872  0.0023    0.00
1442            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1443            RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
                *

1444            KK     D54BASIN
1445            KM        BASIN BOUNDARY FROM FAIRWAYS GOLF COURSE DIVISION
1446            KM        AND PUEBLO EL MIRAGE RV RESORT
1447            BA   0.271
1448            LG    0.17    0.25    4.45    0.51      25
1449            UI       0      76     256     403     587     382     222      90      45      16
1450            UI      16       0       0       0       0       0       0       0       0       0
1451            UI       0       0       0       0       0       0       0       0       0       0
1452            UI       0       0       0       0       0       0       0       0       0       0
1453            UI       0       0       0       0       0       0       0       0       0       0
                *

1454            KK  DD54REDIVERT
1455            KM        NO REPORTS - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
1456            KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
1457            DT    RD54     9.1     0.0
1458            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1459            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1460            KK   CPD54COMBINE
1461            HC       3  10.759
                *

1462            KK     D44BASIN
1463            KM        BASIN BOUNDARY FROM SUNDIAL MULTI PHASE, AGULAR HOMES, TERROVES,
1464            KM        EL MIRAGE HOUSING, ARIZONA BRISAS, MOUNTAIN TRAILE DEVELPMENTS AND
1465            KM        AGUA FRIA RIVER
1466            BA   0.535
1467            LG    0.22    0.24    3.78    0.45      32
1468            UI       0      70     230     379     496     793     718     520     385     234
1469            UI     120      84      43      21      22      22       0       0       0       0
1470            UI       0       0       0       0       0       0       0       0       0       0
1471            UI       0       0       0       0       0       0       0       0       0       0
1472            UI       0       0       0       0       0       0       0       0       0       0
                *

1473            KK  DD44REDIVERT
1474            KM        Retention volume estimated based on aerial
1475            DT    RD44    32.1     0.0
1476            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1477            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                        HEC-1 INPUT                                          PAGE 38

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

1478            KK     D55BASIN
1479            KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
1480            BA   0.187
1481            LG    0.20    0.26    3.48    0.55      26
1482            UI       0      45     158     242     387     279     175      80      44      17
1483            UI      10      11       0       0       0       0       0       0       0       0
1484            UI       0       0       0       0       0       0       0       0       0       0
1485            UI       0       0       0       0       0       0       0       0       0       0
1486            UI       0       0       0       0       0       0       0       0       0       0
                *

1487            KK  DD55REDIVERT
1488            KM        Retention volume estimated based on aerial
1489            DT    RD55    10.4     0.0
1490            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1491            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1492            KK     D56BASIN
1493            KM        BASIN BOUNDARY FROM SUNDIAL UNIT 1 & 2 AND AGUA FRIA RIVER
1494            BA   0.225
1495            LG    0.19    0.25    4.40    0.50      27
1496            UI       0      39     154     228     367     373     251     164      74      45
1497            UI      20      11      11       0       0       0       0       0       0       0
1498            UI       0       0       0       0       0       0       0       0       0       0
1499            UI       0       0       0       0       0       0       0       0       0       0
1500            UI       0       0       0       0       0       0       0       0       0       0
                *
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1501          KK  DD56REDIVERT
1502          KM        NO REPORT - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
1503          KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
1504          DT    RD56     4.6     0.0
1505          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1506          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1507          KK   DUMMYCOMBINE
1508          HC       4
              *

1509          KK   DUMMYCOMBINE
1510          HC       3
              *

1511          KK     D52BASIN
1512          KM        BASIN BOUNDARY FROM RACHO MIRAGE UNITS 1 AND
1513          KM        DYSART HIGH SCHOOL, AND DYSART RACHETTES
1514          BA   0.587
1515          LG    0.28    0.25    5.40    0.26      23
1516          UI       0      69     188     338     438     603     837     625     488     363
1517          UI     237     120      91      61      22      21      21      21       0       0
1518          UI       0       0       0       0       0       0       0       0       0       0
1519          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 39

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

1520          UI       0       0       0       0       0       0       0       0       0       0
              *

1521          KK  DD52REDIVERT
1522          KM        Retention volume estimated based calculation assuming 100-yr 2hr retenti
1523          DT    RD52     4.7     0.0
1524          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1525          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1526          KK  D52D66ROUTE
1527          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
1528          KM        based on aerial & topo / Manning's N Value: clean earth;
1529          KM        straight, street LOB
1530          RS       8    FLOW
1531          RC   0.013   0.022   0.038    5258  0.0015    0.00
1532          RX  100.00  120.00  141.00  153.00  163.00  175.00  595.00  600.00
1533          RY  1095.7 1098.20 1098.00 1095.00 1095.10 1098.00 1098.30 1098.65
              *

1534          KK     D66BASIN
1535          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
1536          BA   0.300
1537          LG    0.10    0.25    4.80    0.42      42
1538          UI       0      72     249     383     617     449     287     132      71      28
1539          UI      17      16       0       0       0       0       0       0       0       0
1540          UI       0       0       0       0       0       0       0       0       0       0
1541          UI       0       0       0       0       0       0       0       0       0       0
1542          UI       0       0       0       0       0       0       0       0       0       0
              *

1543          KK  DD66REDIVERT
1544          KM        Additional Retention based on 100yr 2hr retention.
1545          KM        C value is based on future land use, P=2.7, A=acres
1546          DT    RD66    32.7     0.0
1547          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1548          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1549          KK   CPD66COMBINE
1550          HC       2   0.887
              *

1551          KK  D66D67ROUTE
1552          KM        Cross-section: Cross-section estimated from aerial and topo-road
1553          KM        Manning's N Value: clean earth; straight, street ROB
1554          RS       1    FLOW
1555          RC   0.022   0.022   0.016    1882  0.0032    0.00
1556          RX  100.00  120.00  140.00  150.00  160.00  170.00  178.00  188.00
1557          RY  1092.5 1092.30 1092.00 1090.00 1090.10 1092.00 1092.30 1095.50
              *
1                                          HEC-1 INPUT                                          PAGE 40

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

1558          KK     D67BASIN
1559          KM        BASIN BOUNDARY FROM EL MIRAGE INDUSTRIAL PARK
1560          KM        COYOTE PASS RV STORAGE AND AGUA FRIA RIVER
1561          BA   0.317
1562          LG    0.13    0.25    4.60    0.46      44
1563          UI       0      79     277     424     669     462     293     124      70      23
1564          UI      18       0       0       0       0       0       0       0       0       0
1565          UI       0       0       0       0       0       0       0       0       0       0
1566          UI       0       0       0       0       0       0       0       0       0       0
1567          UI       0       0       0       0       0       0       0       0       0       0
              *

1568          KK  DD67REDIVERT
1569          KM        Additional Retention based on 100yr 2hr retention.
1570          KM        C value is based on future land use, P=2.7, A=acres
1571          DT    RD67    13.9     0.0
1572          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1573          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1574          KK   CPD67COMBINE
1575          HC       2   1.204
              *

1576          KK     D76BASIN
1577          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
1578          KM        1990 TOPO, LUKE INDUSTRIAL PARK, CLAYTON HOMES INC.
1579          BA   0.109
1580          LG    0.13    0.25    4.80    0.41      48
1581          UI       0      33     111     183     235     147      76      32      14       6
1582          UI       0       0       0       0       0       0       0       0       0       0
1583          UI       0       0       0       0       0       0       0       0       0       0
1584          UI       0       0       0       0       0       0       0       0       0       0
1585          UI       0       0       0       0       0       0       0       0       0       0
              *
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1586          KK  DD76REDIVERT
1587          KM        Additional Retention based on 100yr 2hr retention.
1588          KM        C value is based on future land use, P=2.7, A=acres
1589          DT    RD76      5.4      0.0
1590          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1591          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1592          KK  D76D77ROUTE
1593          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width
1594          KM        based on aerial & topo / Manning's N Value: clean earth;
1595          KM        straight; street ROB
1596          RS       1    FLOW
1597          RC   0.022    0.022    0.016     2313  0.0130     0.00
1598          RX  100.00   120.00   140.00   146.00  148.00   154.00   164.00   174.00
1599          RY  1070.5 1070.30 1070.00 1068.00 1068.10 1070.00 1070.30 1070.50
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1600          KK     D77BASIN
1601          KM        BASIN BOUNDARY FROM UNION ROCK & MATERAIL CORR AND AGUA FRIA RIVER
1602          BA   0.361
1603          LG    0.15     0.25     4.60     0.44       54
1604          UI       0      160      503      903      670      352      126       44       27        0
1605          UI       0        0        0        0        0        0        0        0        0        0
1606          UI       0        0        0        0        0        0        0        0        0        0
1607          UI       0        0        0        0        0        0        0        0        0        0
1608          UI       0        0        0        0        0        0        0        0        0        0
              *

1609          KK   CPD77COMBINE
1610          HC       2    0.47
              *

1611          KK   DUMMYCOMBINE
1612          HC       3
              *

1613          KK     D35BASIN
1614          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
1615          BA   0.254
1616          LG    0.18     0.25     4.55     0.45       37
1617          UI       0      153      457      735      406      142       46       21        0        0
1618          UI       0        0        0        0        0        0        0        0        0        0
1619          UI       0        0        0        0        0        0        0        0        0        0
1620          UI       0        0        0        0        0        0        0        0        0        0
1621          UI       0        0        0        0        0        0        0        0        0        0
              *

1622          KK  DD35REDIVERT
1623          KM        Preliminary Drainage Report for Marley Park Phase II Parcel 6
1624          DT    RD35     27.2      0.0
1625          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1626          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1627          KK   DD231RETRIEVE
1628          DR  DD231S
              *

1629          KK  D23D35ROUTE
1630          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1631          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1632          RS      12    FLOW
1633          RC   0.035    0.035    0.035     2692  0.0037     0.00
1634          RX   25.00    50.00    75.00    99.00  124.00   148.00   173.00   198.00
1635          RY  1000.0   999.50   999.00   993.00  993.05   999.00   999.50  1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1636          KK   CPD35COMBINE
1637          HC       2   5.896
              *

1638          KK  DD35SEDIVERT
1639          KM        Litchfield at 1/2 mi S. of Waddell split flow
1640          DT   DD35S      0.0      0.0
1641          DI     0.0    112.5    584.6   1947.2  4136.3      0.0      0.0      0.0      0.0      0.0
1642          DQ     0.0     18.8     97.4    368.7   900.0      0.0      0.0      0.0      0.0      0.0
              *

1643          KK  D35D38ROUTE
1644          KM        Cross-section: Cross-section from Surprise Pointe Master
1645          KM        Drainage Report / Manning's N Value: riprap
1646          RS       7    FLOW
1647          RC   0.032    0.032    0.032     2588  0.0023     0.00
1648          RX  100.00   105.00   110.00   125.50  131.50   151.00   155.00   160.00
1649          RY  1000.0   999.90   999.80   996.10  996.00   999.80   999.90  1000.00
              *

1650          KK     D38BASIN
1651          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
1652          BA   0.321
1653          LG    0.10     0.25     5.10     0.37       40
1654          UI       0       58      224      335      543      530      348      225      101       61
1655          UI      24       16       16        0        0        0        0        0        0        0
1656          UI       0        0        0        0        0        0        0        0        0        0
1657          UI       0        0        0        0        0        0        0        0        0        0
1658          UI       0        0        0        0        0        0        0        0        0        0
              *

1659          KK  DD38REDIVERT
1660          KM        Additional Retention based on 100yr 2hr retention.
1661          KM        C value is based on future land use, P=2.7, A=acres
1662          DT    RD38     34.8      0.0
1663          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1664          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1665          KK   DD232RETRIEVE
1666          DR  DD232S
              *
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1667          KK  D23D38ROUTE
1668          KM        Cross-section: Cross-section determined from ATSF.OUT
1669          KM        received from FCDMC on April 24, 2009-R137
1670          RS      16    FLOW
1671          RC   0.035   0.035   0.035    5273  0.0044    0.00
1672          RX  894.00  906.00  912.00  918.00  926.00  930.00  934.00  942.00
1673          RY  1157.0 1155.00 1154.00 1153.00 1153.00 1154.00 1155.00 1157.00
              *
1                                        HEC-1 INPUT                                                    PAGE 43

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


1674          KK   CPD38COMBINE
1675          HC       3   6.217
              *

1676          KK  D38D40ROUTE
1677          KM        Cross-section: Cross-section determined from Waddell Road
1678          KM        Drainage Improvement CAR Final by HDR dated April 10, 2009, RRR2
1679          RS      18    FLOW
1680          RC   0.035   0.035   0.035    2630  0.0015    0.00
1681          RX    0.00   10.00   20.00   36.00   76.00   92.00  100.00  110.00
1682          RY  1140.0 1140.00 1140.00 1136.00 1136.00 1140.00 1140.00 1140.00
              *

1683          KK     D32BASIN
1684          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
1685          BA   0.248
1686          LG    0.25    0.25    4.70    0.36      35
1687          UI       0      59     207     316     510     371     238     108      59      24
1688          UI      13      14       0       0       0       0       0       0       0       0
1689          UI       0       0       0       0       0       0       0       0       0       0
1690          UI       0       0       0       0       0       0       0       0       0       0
1691          UI       0       0       0       0       0       0       0       0       0       0
              *

1692          KK  DD32REDIVERT
1693          KM        Preliminary Drainage Report for Marley Park Phase II Parcel 6
1694          KM        Drainage Report for Marley Park Parcel 8 (almost 20ac-ft over
1695          KM        required, according to report)
1696          DT    RD32    33.5     0.0
1697          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1698          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1699          KK  DD32SEDIVERT
1700          KM        Cactus at 150th Ln split flow
1701          DT   DD32S     0.0     0.0
1702          DI     0.0     7.4    28.9    41.0   151.6   527.0  1011.0  2605.0     0.0     0.0
1703          DQ     0.0     0.0     1.8     2.3    23.9   213.0   442.0  1123.0     0.0     0.0
              *

1704          KK  D32D33ROUTE
1705          KM        Cross-section: Cross-section determined from aerial
1706          KM        Manning's N Value: street, earth w/ grass
1707          RS       1    FLOW
1708          RC   0.032   0.013   0.013    2704  0.0055    0.00
1709          RX  100.00  102.00  138.00  138.10  160.00  168.50  171.90  172.00
1710          RY  999.70  999.60  999.00  998.50  998.90  999.10  999.20 1000.00
              *
1                                        HEC-1 INPUT                                                    PAGE 44

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


1711          KK     D31BASIN
1712          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
1713          BA   0.497
1714          LG    0.25    0.25    4.70    0.38      32
1715          UI       0      93     354     526     863     812     534     339     150      91
1716          UI      32      25      25       0       0       0       0       0       0       0
1717          UI       0       0       0       0       0       0       0       0       0       0
1718          UI       0       0       0       0       0       0       0       0       0       0
1719          UI       0       0       0       0       0       0       0       0       0       0
              *

1720          KK  DD31REDIVERT
1721          KM        Preliminary Drainage Report for Marley Park Plaza, Drainage
1722          KM        Report for Waddell Road at Marley Park, Final Drainage Report
1723          KM        Amended for Marley Park Heritage Club Site, Drainage Report for
1724          KM        Marley Park Parcel 11, Drainage Report for Marley Park Phase 2A Mass
1725          DT    RD31    74.2     0.0
1726          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1727          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1728          KK   DD211RETRIEVE
1729          DR  DD211S
              *

1730          KK  D21D31ROUTE
1731          KM        Cross-section: Cross-section determined from aerial
1732          KM        Manning's N Value: earth w/ grass (main channel),
1733          KM        earth with sparse trees and shrubs (left overbank)
1734          RS       2    FLOW
1735          RC   0.032   0.025   0.025    2676  0.0052    0.00
1736          RX  100.00  102.00  104.00  124.00  128.00  132.00  135.00  137.00
1737          RY  1170.0 1168.00 1167.00 1167.00 1168.00 1169.00 1169.50 1170.00
              *

1738          KK   CPD31COMBINE
1739          HC       2     2.5
              *

1740          KK  D31D33ROUTE
1741          KM        Cross-section: Cross-section determined from aerial
1742          KM        Manning's N Value: earth w/ grass
1743          RS       1    FLOW
1744          RC   0.025   0.025   0.025    2627  0.0042    0.00
1745          RX  100.00  100.50  105.00  113.00  116.00  125.00  129.00  130.00
1746          RY  1003.0  999.90  999.80  997.80  997.70  999.80 1000.00 1000.80
              *

1747          KK     D33BASIN
1748          KM        BASIN BOUNDARY FROM RANCHO GABRIELA PHASE 1
1749          BA   0.250
1750          LG    0.25    0.25    4.80    0.35      35
1751          UI       0      71     242     384     542     349     195      81      38      15
1752          UI      15       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1753          UI       0       0       0       0       0       0       0       0       0       0
1754          UI       0       0       0       0       0       0       0       0       0       0
1755          UI       0       0       0       0       0       0       0       0       0       0
              *

1756          KK  DD33REDIVERT
1757          KM        Retention volume estimated based on aerial, Ranch Gabriella Phase I
1758          DT    RD33    18.8     0.0
1759          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1760          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1761          KK   CPD33COMBINE
1762          HC       3   2.998
              *

1763          KK   DD331DIVERT
1764          KM        Cactus at Bullard split flow
1765          DT  DD331S     0.0     0.0
1766          DI     0.0   136.2   690.5  2301.7  4749.1     0.0     0.0     0.0     0.0     0.0
1767          DQ     0.0    73.3   386.4  1268.6  2600.8     0.0     0.0     0.0     0.0     0.0
              *

1768          KK   DD332DIVERT
1769          KM        Cactus at Bullard split flow
1770          DT  DD332S     0.0     0.0
1771          DI     0.0    62.9   304.1  1033.1  2148.3     0.0     0.0     0.0     0.0     0.0
1772          DQ     0.0    31.8    90.0   165.3   254.6     0.0     0.0     0.0     0.0     0.0
              *

1773          KK  D33D34ROUTE
1774          KM        Cross-section: Cross-section determined from aerial
1775          KM        Manning's N Value: earth w/ grass
1776          RS       6    FLOW
1777          RC   0.025   0.025   0.025    5348  0.0030    0.00
1778          RX  100.00  105.00  123.00  127.00  133.00  139.00  141.00  152.00
1779          RY  1142.0 1141.00 1141.00 1140.00 1139.00 1140.00 1141.00 1141.50
              *

1780          KK     D34BASIN
1781          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
1782          BA   0.500
1783          LG    0.25    0.25    4.65    0.38      35
1784          UI       0     104     383     571     955     775     516     287     138      72
1785          UI      26      27       0       0       0       0       0       0       0       0
1786          UI       0       0       0       0       0       0       0       0       0       0
1787          UI       0       0       0       0       0       0       0       0       0       0
1788          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1789          KK  DD34REDIVERT
1790          KM        Final Drainage Report for Marley Park Waddell Road, Phase 2
1791          KM        (Empty Lot except for retention for Waddell Rd-Future Marley Park)
1792          DT    RD34    55.9     0.0
1793          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1794          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1795          KK   DD212RETRIEVE
1796          DR  DD212S
              *

1797          KK  D21D34ROUTE
1798          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1799          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1800          RS       5    FLOW
1801          RC   0.035   0.035   0.035    3892  0.0057    0.00
1802          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1803          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1804          KK   CPD34COMBINE
1805          HC       3   3.498
              *

1806          KK  D34D36ROUTE
1807          KM        Cross-section: Cross-section taken from Infrastructure Drainage Report f
1808          KM        Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees and br
1809          RS       5    FLOW
1810          RC   0.032   0.032   0.032    5236  0.0034    0.00
1811          RX  100.00  100.10  102.00  108.00  111.00  117.00  125.00  140.00
1812          RY  1000.0  998.00  997.90  996.50  996.40  998.00  999.00 1000.00
              *

1813          KK     D36BASIN
1814          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
1815          BA   0.247
1816          LG    0.21    0.25    4.80    0.37      36
1817          UI       0     100     312     567     483     277     100      42      18       0
1818          UI       0       0       0       0       0       0       0       0       0       0
1819          UI       0       0       0       0       0       0       0       0       0       0
1820          UI       0       0       0       0       0       0       0       0       0       0
1821          UI       0       0       0       0       0       0       0       0       0       0
              *

1822          KK  DD36REDIVERT
1823          KM        Additional Retention based on 100yr 2hr retention.
1824          KM        C value is based on future land use, P=2.7, A=acres
1825          DT    RD36    18.7     0.0
1826          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1827          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1828          KK  DD35SERETRIEVE
1829          DR   DD35S
              *

1830          KK  D35D36ROUTE
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1831          KM        Cross-section: Cross-section taken from Infrastructure Drainage Report f
1832          KM        Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees and br
1833          RS      10    FLOW
1834          RC   0.032   0.032   0.032    2638  0.0038    0.00
1835          RX  100.00  103.00  108.00  126.00  130.00  142.00  143.00  144.00
1836          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
              *

1837          KK   CPD36COMBINE
1838          HC       3   7.638
              *

1839          KK   DD361DIVERT
1840          KM        Cactus at Litchfield split flow
1841          DT  DD361S     0.0     0.0
1842          DI     0.0     0.0    70.2   838.2  2790.2     0.0     0.0     0.0     0.0     0.0
1843          DQ     0.0     0.0    64.8   768.5  2105.4     0.0     0.0     0.0     0.0     0.0
              *

1844          KK   DD362DIVERT
1845          KM        Cactus at Litchfield split flow
1846          DT  DD362S     0.0     0.0
1847          DI     0.0     0.0     5.4    69.6   684.8     0.0     0.0     0.0     0.0     0.0
1848          DQ     0.0     0.0     5.4    35.1    78.9     0.0     0.0     0.0     0.0     0.0
              *

1849          KK  D36D40ROUTE
1850          KM        Cross-section: Cross-section determined from ATSF.OUT
1851          KM        received from FCDMC on April 24, 2009-R151
1852          RS       2    FLOW
1853          RC   0.080   0.035   0.035    2600  0.0027    0.00
1854          RX  1000.0 1090.00 1710.00 2160.00 2240.00 2268.00 2269.00 2270.00
1855          RY  1141.0 1140.00 1138.00 1136.00 1136.00 1137.00 1137.00 1137.00
              *

1856          KK     D40BASIN
1857          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
1858          BA   0.242
1859          LG    0.10    0.25    5.40    0.32      40
1860          UI       0     198     627     674     268      76      23       0       0       0
1861          UI       0       0       0       0       0       0       0       0       0       0
1862          UI       0       0       0       0       0       0       0       0       0       0
1863          UI       0       0       0       0       0       0       0       0       0       0
1864          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1865          KK  DD40REDIVERT
1866          KM        Additional Retention based on 100yr 2hr retention.
1867          KM        C value is based on future land use, P=2.7, A=acres
1868          DT    RD40    26.4     0.0
1869          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1870          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1871          KK   CPD40COMBINE
1872          HC       3   8.201
              *

1873          KK  D4049AROUTE
1874          KM        Cross-section: Cross-section determined from ATSF.OUT
1875          KM        received from FCDMC on April 24, 2009-RRR3
1876          RS       5    FLOW
1877          RC   0.013   0.013   0.130    1983  0.0013    0.00
1878          RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
1879          RY  1130.0 1130.00 1130.00 1126.00 1126.00 1130.00 1130.00 1130.00
              *

1880          KK  D4049BROUTE
1881          KM        Cross-section: Cross-section determined from ATSF.OUT
1882          KM        received from FCDMC on April 24, 2009-RRRW
1883          RS       5    FLOW
1884          RC   0.013   0.013   0.013    3185  0.0033    0.00
1885          RX    0.00   10.00   20.00   20.10   34.90   35.00   40.00   50.00
1886          RY  1130.0 1130.00 1130.00 1126.00 1126.00 1130.00 1130.00 1130.00
              *

1887          KK     D47BASIN
1888          KM        BASIN BOUNDARY FROM RANCHO GABRIELA MULTI PHASE
1889          BA   0.997
1890          LG    0.21    0.25    4.65    0.40      36
1891          UI       0     109     277     518     667     876    1305    1130     877     663
1892          UI     496     273     186     123      80      34      34      34      34       0
1893          UI       0       0       0       0       0       0       0       0       0       0
1894          UI       0       0       0       0       0       0       0       0       0       0
1895          UI       0       0       0       0       0       0       0       0       0       0
              *

1896          KK  DD47REDIVERT
1897          KM        Drainage Report for Imagine Charter Schools, Retention
1898          KM        Calculations for Rancho Gabrialla Elementary School No 13,
1899          KM        Remaining retention volume estimated based on aerial
1900          DT    RD47   119.6     0.0
1901          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1902          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1903          KK  DD32SERETRIEVE
1904          DR   DD32S
              *

1905          KK  D3247AROUTE
1906          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1907          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1908          RS       1    FLOW
1909          RC   0.035   0.035   0.035    6247  0.0026    0.00
1910          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1911          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1912          KK  D3247BROUTE
1913          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1914          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
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1915          RS       1    FLOW
1916          RC   0.035   0.035   0.035    3975  0.0025    0.00
1917          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1918          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1919          KK   DD331RETRIEVE
1920          DR  DD331S
              *

1921          KK  D3347AROUTE
1922          KM        Cross-section determined from aerial, assumed 1' deep
1923          KM        Manning's N Value: earth with grass, earth with sparse trees and shrubs
1924          RS       5    FLOW
1925          RC   0.032   0.025   0.032    2661  0.0023    0.00
1926          RX  100.00  120.00  139.00  143.00  158.00  162.00  199.00  200.00
1927          RY  1000.0  999.60  999.50  998.50  998.40  999.50  999.60 1000.00
              *

1928          KK  D3347BROUTE
1929          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1930          KM        Manning's N Value: Ag field
1931          RS       3    FLOW
1932          RC   0.035   0.035   0.035    2661  0.0023    0.00
1933          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1934          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1935          KK   CPD47COMBINE
1936          HC       3   3.995
              *

1937          KK  DD47SEDIVERT
1938          KM        Peoria at Bullard split flow
1939          DT   DD47S     0.0     0.0
1940          DI     0.0   692.3  2751.1  6693.8 12151.5     0.0     0.0     0.0     0.0     0.0
1941          DQ     0.0   609.8  2322.4  5410.8  9603.6     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1942          KK  D47D48ROUTE
1943          KM        Cross-section: Cross-section determined from aerial
1944          KM        Manning's N Value: earth w/ sparse trees and brush
1945          RS      15    FLOW
1946          RC   0.032   0.032   0.032    5328  0.0036    0.00
1947          RX  100.00  100.10  100.20  110.00  144.00  154.00  155.00  156.00
1948          RY  1000.2 1000.10 1000.00  997.00  996.90 1000.00 1000.10 1000.20
              *

1949          KK     D48BASIN
1950          KM        BASIN BOUNDARY FROM MOUNTAIN GATE MULIT PHASE, AG LAND AND 1990 TOPO
1951          BA   0.998
1952          LG    0.24    0.25    4.80    0.34      23
1953          UI       0      97     186     404     529     656     839    1192     981     767
1954          UI     612     490     334     180     157      96      67      29      30      29
1955          UI      30       0       0       0       0       0       0       0       0       0
1956          UI       0       0       0       0       0       0       0       0       0       0
1957          UI       0       0       0       0       0       0       0       0       0       0
              *

1958          KK  DD48REDIVERT
1959          KM        Master Drainage Report for Mountain Gate,
1960          KM        Final Drainage Report for Kenly Farms Unit 1
1961          DT    RD48    79.3     0.0
1962          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1963          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1964          KK   DD332RETRIEVE
1965          DR  DD332S
              *

1966          KK  D33D48ROUTE
1967          KM        Cross-section: Cross-section determined from aerial
1968          KM        Manning's N Value: earth w/ sparse trees and shrubs
1969          RS      16    FLOW
1970          RC   0.032   0.032   0.032    9601  0.0031    0.00
1971          RX  100.00  101.00  102.00  114.00  138.00  150.00  151.00  152.00
1972          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *

1973          KK   DD361RETRIEVE
1974          DR  DD361S
              *

1975          KK  D3648AROUTE
1976          KM        Cross-section: Cross-section determined from aerial
1977          KM        Manning's N Value: clean earth (center), street (lt), and Ag field (rt)
1978          RS       6    FLOW
1979          RC   0.013   0.022   0.038    3335  0.0030    0.00
1980          RX  100.00  106.00  112.00  125.00  126.00  135.00  200.00  290.00
1981          RY  1000.0  999.90  999.70  999.00  998.90  999.10 1000.00 1001.00
              *
1                                          HEC-1 INPUT                                          PAGE 51

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

1982          KK  D3648BROUTE
1983          KM        Cross-section: Cross-section determined from aerial
1984          KM        Manning's N Value: clean earth; straight
1985          RS       2    FLOW
1986          RC   0.022   0.022   0.022    1965  0.0031    0.00
1987          RX  100.00  100.50  110.00  120.00  140.00  150.00  160.00  161.00
1988          RY  1003.0 1000.00  999.50  997.50  997.40  999.50  999.90 1000.00
              *

1989          KK   CPD48COMBINE
1990          HC       4   9.633
              *

1991          KK   DD481DIVERT
1992          KM        Peoria at Litchfield split flow
1993          DT  DD481S     0.0     0.0
1994          DI     0.0   624.6  2594.8  5787.1 10151.4     0.0     0.0     0.0     0.0     0.0
1995          DQ     0.0   532.1  1825.7  3708.3  6197.9     0.0     0.0     0.0     0.0     0.0
              *
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1996          KK   DD482DIVERT
1997          KM        Peoria at Litchfield split flow
1998          DT  DD482S      0.0      0.0
1999          DI     0.0     92.5    769.1  2078.8  3953.5     0.0     0.0     0.0     0.0     0.0
2000          DQ     0.0     22.8     76.8   149.1   235.7     0.0     0.0     0.0     0.0     0.0
              *

2001          KK  D48D49ROUTE
2002          KM        Cross-section: Cross-section determined from aerial
2003          KM        Manning's N Value: clean earth: straight and half street
2004          RS       5    FLOW
2005          RC   0.022   0.022   0.013    2623  0.0034    0.00
2006          RX  100.00  101.00  102.00  115.00  125.00  143.00  150.00  156.00
2007          RY  1000.2 1000.10 1000.00  998.00  998.10 1000.00 1000.40 1000.60
              *

2008          KK     D49BASIN
2009          KM        BASIN BOUNDARY FROM CITY OF SURPRISE WWTP
2010          BA   0.489
2011          LG    0.12    0.25    4.90    0.40      37
2012          UI       0     130     448     699    1052     700     415     175      94      29
2013          UI      28       0       0       0       0       0       0       0       0       0
2014          UI       0       0       0       0       0       0       0       0       0       0
2015          UI       0       0       0       0       0       0       0       0       0       0
2016          UI       0       0       0       0       0       0       0       0       0       0
              *

2017          KK  DD49REDIVERT
2018          KM        City of Surprise Special Planning Area 1 16.3 MGD
2019          KM        Water Reclamation Facility (PROVIDED VOLUME
2020          KM        NOT IN PLANS, USED REQUIRED VOLUME)
2021          DT    RD49     7.5     0.0
2022          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2023          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2024          KK   DD362RETRIEVE
2025          DR  DD362S
              *

2026          KK  D36D49ROUTE
2027          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2028          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2029          RS      20    FLOW
2030          RC   0.035   0.035   0.035    6555  0.0038    0.00
2031          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2032          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2033          KK   CPD49COMBINE
2034          HC       4  10.685
              *

2035          KK  D49D63ROUTE
2036          KM        Cross-section: Cross-section determined from ATSF.OUT
2037          KM        received from FCDMC on April 24, 2009-RRRW
2038          RS       1    FLOW
2039          RC   0.035   0.035   0.035    2712  0.0015    0.00
2040          RX    0.00   10.00   20.00   36.00   86.00  102.00  110.00  120.00
2041          RY  1114.0 1114.00 1114.00 1110.00 1110.00 1114.00 1114.00 1114.00
              *

2042          KK     D60BASIN
2043          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
2044          KM        1990 TOPO, AND RR ALIGNMENT
2045          BA   0.404
2046          LG    0.11    0.25    4.55    0.48      74
2047          UI       0     146     473     836     826     492     199      96      27      27
2048          UI       0       0       0       0       0       0       0       0       0       0
2049          UI       0       0       0       0       0       0       0       0       0       0
2050          UI       0       0       0       0       0       0       0       0       0       0
2051          UI       0       0       0       0       0       0       0       0       0       0
              *

2052          KK  DD60REDIVERT
2053          KM        Additional Retention based on 100yr 2hr retention.
2054          KM        C value is based on future land use, P=2.7, A=acres
2055          DT    RD60    39.4     0.0
2056          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2057          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2058          KK   DD481RETRIEVE
2059          DR  DD481S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2060          KK  D48D60ROUTE
2061          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based
2062          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush (main
2063          KM        channel), 1/2 street (left bank), Ag field (right bank)
2064          RS       2    FLOW
2065          RC   0.013   0.032   0.038    2425  0.0037    0.00
2066          RX  100.00  110.00  112.00  122.00  132.00  144.00  244.00  344.00
2067          RY  1120.4 1120.20 1120.00 1118.00 1118.10 1120.00 1120.10 1120.40
              *

2068          KK   CPD60COMBINE
2069          HC       2  10.037
              *

2070          KK  D60D63ROUTE
2071          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
2072          KM        aerial & topo / Manning's N Value: clean earth, straight; Ag field
2073          RS       2    FLOW
2074          RC   0.038   0.022   0.022    1984  0.0020    0.00
2075          RX  100.00  120.00  140.00  152.00  156.00  168.00  182.00  188.00
2076          RY  1111.3 1111.10 1111.00 1108.00 1107.90 1111.00 1111.20 1111.30
              *

2077          KK     D63BASIN
2078          KM        BASIN BOUNDARY FROM 1990 TOPO, AG LAND, AND SMALL AREA OF 2008 TOPO.
```

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2079          KM        AERIAL CONFIRMS AREA OF OVERTOPPING ON RR TRACKS, EVIDENCE OF TRACK
2080          KM        REPLACEMENT
2081          BA   0.222
2082          LG    0.10    0.25    4.35    0.56      80
2083          UI       0     206     654     584     205      48       0       0       0       0
2084          UI       0       0       0       0       0       0       0       0       0       0
2085          UI       0       0       0       0       0       0       0       0       0       0
2086          UI       0       0       0       0       0       0       0       0       0       0
2087          UI       0       0       0       0       0       0       0       0       0       0
              *

2088          KK  DD63REDIVERT
2089          KM        Additional Retention based on 100yr 2hr retention.
2090          KM        C value is based on future land use, P=2.7, A=acres
2091          DT    RD63    24.1     0.0
2092          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2093          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2094          KK   DD482RETRIEVE
2095          DR  DD482S
              *

2096          KK  D48D63ROUTE
2097          KM        Cross-section: cross-section estimated from aerial, estimated 1' depth
2098          KM        Manning's N Value: clean earth, straight
2099          RS      52    FLOW
2100          RC   0.038   0.038   0.038    5267  0.0015    0.00
2101          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1                                          HEC-1 INPUT                                                PAGE 54

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

2102          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

2103          KK   CPD63COMBINE
2104          HC       4  11.311
              *

2105          KK   SRD63STORAGE
2106          KM        Storage behind AT&SF Railroad tracks
2107          KO
2108          RS       1    STOR
2109          SV            4.55   22.10   52.90  108.20  174.60  245.00  336.00  397.00
2110          SQ           35.00   60.00  335.00  715.00  915.00 1065.00 1225.00 1385.00
2111          SE  1095.0 1098.00 1100.00 1102.00 1104.00 1106.00 1108.00 1110.00 1112.00
2112          ST
              *

2113          KK  D63D64ROUTE
2114          KM        Cross-section: Cross-section determined from ATSF.OUT
2115          KM        received from FCDMC on April 24, 2009-RRR5
2116          RS       5    FLOW
2117          RC   0.035   0.035   0.035    3291  0.0015    0.00
2118          RX    0.00   10.00   20.00   36.00   86.00  102.00  110.00  120.00
2119          RY  1114.0 1114.00 1114.00 1110.00 1110.00 1114.00 1114.00 1114.00
              *

2120          KK     D62BASIN
2121          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2122          KM        1990 TOPO, AND BNSF RR ALIGNMENT
2123          BA   0.250
2124          LG    0.11    0.25    4.40    0.53      75
2125          UI       0     181     545     729     336     102      26       0       0       0
2126          UI       0       0       0       0       0       0       0       0       0       0
2127          UI       0       0       0       0       0       0       0       0       0       0
2128          UI       0       0       0       0       0       0       0       0       0       0
2129          UI       0       0       0       0       0       0       0       0       0       0
              *

2130          KK  DD62REDIVERT
2131          KM        Additional Retention based on 100yr 2hr retention.
2132          KM        C value is based on future land use, P=2.7, A=acres
2133          DT    RD62    25.3     0.0
2134          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2135          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2136          KK   DD621DIVERT
2137          KM        Olive at Litchfield Rd split flow
2138          DT  DD621S     0.0     0.0
2139          DI     0.0    67.0   812.8  2353.7  4689.4     0.0     0.0     0.0     0.0     0.0
2140          DQ     0.0    50.7   512.2  1401.2  2724.4     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                                PAGE 55

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

2141          KK   DD622DIVERT
2142          KM        Olive at Litchfield Rd split flow
2143          DT  DD622S     0.0     0.0
2144          DI     0.0    16.2   300.6   952.6  1965.0     0.0     0.0     0.0     0.0     0.0
2145          DQ     0.0     8.0    52.7   118.3   199.5     0.0     0.0     0.0     0.0     0.0
              *

2146          KK  D62D64ROUTE
2147          KM        Cross-section: Estimated 3' deep and 5:1 side slopes, width based on aer
2148          KM        & topo / Manning's N Value: clean earth channel; street ROW
2149          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
2150          KM        aerial & topo / Manning's N Value: clean earth; straight, left LOB
2151          RS      12    FLOW
2152          RC   0.022   0.022   0.013    5287  0.0019    0.00
2153          RX  100.00  120.00  140.00  156.00  160.00  176.00  183.00  210.00
2154          RY  1099.2 1099.10 1099.00 1096.00 1095.90 1099.00 1099.10 1099.20
              *

2155          KK     D64BASIN
2156          KM        Boundary based on AT&SF CAR
2157          BA   0.274
2158          LG    0.11    0.25    4.40    0.54      75
2159          UI       0     170     501     793     432     149      47      23       0       0
2160          UI       0       0       0       0       0       0       0       0       0       0
2161          UI       0       0       0       0       0       0       0       0       0       0
2162          UI       0       0       0       0       0       0       0       0       0       0
2163          UI       0       0       0       0       0       0       0       0       0       0
              *

2164          KK  DD64REDIVERT
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2165          KM        Additional Retention based on 100yr 2hr retention.
2166          KM        C value is based on future land use, P=2.7, A=acres
2167          DT    RD64    26.7     0.0
2168          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2169          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2170          KK   CPD64COMBINE
2171          HC       3  11.835
              *

2172          KK  D64D74ROUTE
2173          KM        Cross-section: Cross-section determined from ATSF.OUT
2174          KM        received from FCDMC on April 24, 2009-RRR6
2175          RS       6    FLOW
2176          RC   0.035   0.035   0.035    4677  0.0015    0.00
2177          RX    0.00   10.00   20.00   36.00   86.00  102.00  110.00  120.00
2178          RY  1114.0 1114.00 1114.00 1110.00 1110.00 1114.00 1114.00 1114.00
              *
1                                          HEC-1 INPUT                                          PAGE 56

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

2179          KK    D73ABASIN
2180          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2181          BA   0.243
2182          LG    0.20    0.25    4.55    0.42      43
2183          UI       0      88     284     503     497     296     120      57      17      16
2184          UI       0       0       0       0       0       0       0       0       0       0
2185          UI       0       0       0       0       0       0       0       0       0       0
2186          UI       0       0       0       0       0       0       0       0       0       0
2187          UI       0       0       0       0       0       0       0       0       0       0
              *

2188          KK  DD73ARDIVERT
2189          KM        Additional Retention based on 100yr 2hr retention.
2190          KM        C value is based on future land use, P=2.7, A=acres
2191          DT   RD73A    13.5     0.0
2192          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2193          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2194          KK   DD621RETRIEVE
2195          DR  DD621S
              *

2196          KK  D6273AROUTE
2197          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
2198          KM        aerial & topo / Manning's N Value: clean earth; straight
2199          RS       7    FLOW
2200          RC   0.022   0.022   0.022    6486  0.0045    0.00
2201          RX  100.00  111.00  122.00  134.00  138.00  150.00  160.00  170.00
2202          RY  1094.2 1094.10 1094.00 1091.00 1091.10 1094.00 1094.10 1094.20
              *

2203          KK  CPD73ACOMBINE
2204          HC       2   0.493
              *

2205          KK  D73A74ROUTE
2206          KM        Cross-section: Cross-section determined from ATSF.OUT
2207          KM        received from FCDMC on April 24, 2009-R196B
2208          RS       1    FLOW
2209          RC   0.025   0.025   0.025    3524  0.0030    0.00
2210          RX  1500.0 1501.00 1588.00 1600.00 1612.00 1630.00 1699.00 1700.00
2211          RY  1102.0 1101.00 1101.00 1098.00 1098.00 1101.00 1101.00 1102.00
              *

2212          KK     D74BASIN
2213          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
2214          BA   0.314
2215          LG    0.10    0.25    4.50    0.51      80
2216          UI       0      95     321     524     679     424     217      93      41      19
2217          UI       0       0       0       0       0       0       0       0       0       0
2218          UI       0       0       0       0       0       0       0       0       0       0
2219          UI       0       0       0       0       0       0       0       0       0       0
2220          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE 57

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

2221          KK  DD74REDIVERT
2222          KM        Additional Retention based on 100yr 2hr retention.
2223          KM        C value is based on future land use, P=2.7, A=acres
2224          DT    RD74    34.3     0.0
2225          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2226          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2227          KK   DD622RETRIEVE
2228          DR  DD622S
              *

2229          KK  D62D74ROUTE
2230          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2231          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2232          RS      24    FLOW
2233          RC   0.035   0.035   0.035    7477  0.0035    0.00
2234          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2235          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2236          KK   CPD74COMBINE
2237          HC       4  12.392
              *

2238          KK   SRD74STORAGE
2239          KM        PONDING BEHIND NEW BASIN AT NORTHERN PARKWAY, SRRR7 PER ATSF.OUT
2240          KO
2241          RS       1    STOR
2242          SV            0.50    4.20   12.70   23.70   36.00   49.00   62.00   75.00   89.00
2243          SQ            5.00   20.00   35.00   50.00  152.00  325.00  500.00  550.00  620.00
2244          SE  1073.0 1074.00 1075.00 1076.00 1077.00 1078.00 1079.00 1080.00 1081.00 1082.00
2245          ST
              *

2246          KK    D78ABASIN
```

```
2247          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2248          BA   0.184
2249          LG    0.10    0.25    4.60    0.47      79
2250          UI       0      46     160     246     389     267     171      72      41      13
2251          UI      11       0       0       0       0       0       0       0       0       0
2252          UI       0       0       0       0       0       0       0       0       0       0
2253          UI       0       0       0       0       0       0       0       0       0       0
2254          UI       0       0       0       0       0       0       0       0       0       0
              *

2255          KK  DD78ARDIVERT
2256          KM        Additional Retention based on 100yr 2hr retention.
2257          KM        C value is based on future land use, P=2.7, A=acres
2258          DT   RD78A    20.1     0.0
2259          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2260          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE 58

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

2261          KK  CPD78ACOMBINE
2262          HC       2  12.576
              *

2263          KK  D78ACPROUTE
2264          KM        Cross-section: Cross-section determined from ATSF.OUT
2265          KM        received from FCDMC on April 24, 2009-RRR7
2266          RS       1    FLOW
2267          RC   0.013   0.013   0.013    1641  0.0013    0.00
2268          RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
2269          RY  1080.0 1080.00 1080.00 1076.00 1076.00 1080.00 1080.00 1080.00
              *

2270          KK     D41BASIN
2271          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2272          BA   0.253
2273          LG    0.10    0.15    7.30    0.15      40
2274          UI       0     329     974     515     109      32       0       0       0       0
2275          UI       0       0       0       0       0       0       0       0       0       0
2276          UI       0       0       0       0       0       0       0       0       0       0
2277          UI       0       0       0       0       0       0       0       0       0       0
2278          UI       0       0       0       0       0       0       0       0       0       0
              *

2279          KK  DD41REDIVERT
2280          KM        Additional Retention based on 100yr 2hr retention.
2281          KM        C value is based on future land use, P=2.7, A=acres
2282          DT    RD41    27.1     0.0
2283          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2284          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2285          KK  D41D50ROUTE
2286          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2287          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2288          RS      28    FLOW
2289          RC   0.035   0.035   0.035    6744  0.0030    0.00
2290          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2291          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2292          KK     D50BASIN
2293          KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
2294          BA   0.505
2295          LG    0.10    0.15    7.00    0.17      41
2296          UI       0      88     350     515     833     834     563     362     164      99
2297          UI      42      25      25       0       0       0       0       0       0       0
2298          UI       0       0       0       0       0       0       0       0       0       0
2299          UI       0       0       0       0       0       0       0       0       0       0
2300          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE 59

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

2301          KK  DD50REDIVERT
2302          KM        Additional Retention based on 100yr 2hr retention.
2303          KM        C value is based on future land use, P=2.7, A=acres
2304          DT    RD50    51.3     0.0
2305          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2306          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2307          KK   CPD50COMBINE
2308          HC       2   0.758
              *

2309          KK  D5064AROUTE
2310          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2311          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2312          RS      21    FLOW
2313          RC   0.035   0.035   0.035    5294  0.0032    0.00
2314          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2315          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2316          KK    D64ABASIN
2317          KM        Boundary based on AT&SF CAR
2318          BA   0.497
2319          LG    0.10    0.25    4.80    0.43      42
2320          UI       0     139     477     757    1071     693     401     163      79      29
2321          UI      30       0       0       0       0       0       0       0       0       0
2322          UI       0       0       0       0       0       0       0       0       0       0
2323          UI       0       0       0       0       0       0       0       0       0       0
2324          UI       0       0       0       0       0       0       0       0       0       0
              *

2325          KK  DD64ARDIVERT
2326          KM        Additional Retention based on 100yr 2hr retention.
2327          KM        C value is based on future land use, P=2.7, A=acres
2328          DT   RD64A    54.4     0.0
2329          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2330          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2331          KK  CPD64ACOMBINE
2332          HC       2   1.255
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                *
2333            KK  64A74AROUTE
2334            KM        Cross-section: Estimated 3' deep and 4:1 side slopes,
2335            KM        width based on aerial & topo
2336            KM        Manning's N Value: clean earth; straight, left LOB
2337            RS       9    FLOW
2338            RC   0.016   0.022   0.022    5291  0.0025    0.00
2339            RX  100.00  120.00  140.00  152.00  158.00  170.00  175.00  180.00
2340            RY  1090.5 1090.25 1090.00 1087.00 1087.10 1090.00 1090.25 1090.50
                *
1                                          HEC-1 INPUT                                                    PAGE 60

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


2341            KK    D74ABASIN
2342            KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2343            BA   0.492
2344            LG    0.10    0.25    4.65    0.46      56
2345            UI       0     141     483     763    1070     680     378     156      74      29
2346            UI      30       0       0       0       0       0       0       0       0       0
2347            UI       0       0       0       0       0       0       0       0       0       0
2348            UI       0       0       0       0       0       0       0       0       0       0
2349            UI       0       0       0       0       0       0       0       0       0       0
                *

2350            KK  DD74ARDIVERT
2351            KM        Additional Retention based on 100yr 2hr retention.
2352            KM        C value is based on future land use, P=2.7, A=acres
2353            DT   RD74A    40.1     0.0
2354            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2355            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

2356            KK  CPD74ACOMBINE
2357            HC       2   1.747
                *

2358            KK  D74A78ROUTE
2359            KM        Cross-section: Cross-section determined from ATSF.OUT
2360            KM        received from FCDMC on April 24, 2009-R197
2361            RS       1    FLOW
2362            RC   0.025   0.025   0.025    1159  0.0030    0.00
2363            RX  1500.0 1501.00 1588.00 1600.00 1624.00 1642.00 1697.00 1700.00
2364            RY  1096.0 1095.00 1094.00 1091.00 1091.00 1094.00 1095.00 1096.00
                *

2365            KK  CP7874COMBINE
2366            HC       2  14.323
                *

2367            KK  78A78BROUTE
2368            KM        Cross-section: Cross-section determined from ATSF.OUT
2369            KM        received from FCDMC on April 24, 2009-RRR8
2370            RS       2    FLOW
2371            RC   0.013   0.013   0.013    5190  0.0013    0.00
2372            RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
2373            RY  1080.0 1080.00 1080.00 1076.00 1076.00 1080.00 1080.00 1080.00
                *

2374            KK     D06BASIN
2375            KM        BASIN BOUNDARY FROM SUN CITY GRAND
2376            BA   0.463
2377            LG    0.22    0.19    6.60    0.18      32
2378            UI       0      62     202     329     441     705     609     449     329     192
2379            UI     104      70      34      18      19      19       0       0       0       0
2380            UI       0       0       0       0       0       0       0       0       0       0
2381            UI       0       0       0       0       0       0       0       0       0       0
2382            UI       0       0       0       0       0       0       0       0       0       0
                *
1                                          HEC-1 INPUT                                                    PAGE 61

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


2383            KK  DD06REDIVERT
2384            KM        Master Drainage Report for Del Webb's Grand Avenue Property
2385            DT    RD06    32.0     0.0
2386            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2387            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

2388            KK  DD06SEDIVERT
2389            KM        Divert based on capacity at Bell Road. Bell Rd section from
2390            KM        Final Drainage Report for Westfield Commons Jan 2008
2391            DT   DD06S     0.0     0.0
2392            DI     0.0   100.0   200.0   300.0   370.0   400.0   800.0  1000.0 10000.0     0.0
2393            DQ     0.0     0.0     0.0     0.0     0.0    30.0   430.0   630.0  9630.0     0.0
                *

2394            KK  D06D07ROUTE
2395            KM        Cross-section: Cross-section determined from aerial
2396            KM        Manning's N Value: street and ROW, left overbank is
2397            KM        earth with sparse trees and shrubs
2398            RS       1    FLOW
2399            RC   0.013   0.013   0.013    2785  0.0052    0.00
2400            RX  100.00  100.10  118.70  118.80  165.00  211.10  211.20  230.00
2401            RY  1266.0 1264.00 1263.74 1263.24 1264.00 1263.50 1264.00 1264.38
                *

2402            KK     D07BASIN
2403            KM        BASIN BOUNDARY FROM SUN CITY GRAND
2404            BA   0.886
2405            LG    0.21    0.23    6.20    0.22      27
2406            UI       0      85     162     361     465     582     741    1047     875     683
2407            UI     548     437     297     162     142      85      62      26      27      26
2408            UI      26       0       0       0       0       0       0       0       0       0
2409            UI       0       0       0       0       0       0       0       0       0       0
2410            UI       0       0       0       0       0       0       0       0       0       0
                *

2411            KK  DD07REDIVERT
2412            KM        Master Drainage Report for Del Webb's Grand Avenue Property
2413            DT    RD07    61.2     0.0
2414            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2415            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

2416            KK   CPD07COMBINE
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2417          HC       2   1.349
              *

2418          KK  D07D02ROUTE
2419          KM        Cross-section: Estimated 3' deep, side slopes and width based
2420          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
2421          RS       1    FLOW
2422          RC   0.032   0.032   0.032    1520  0.0013    0.00
2423          RX  100.00  100.10  100.20  133.00  156.00  174.80  174.90  175.00
2424          RY  1001.0  999.90  999.80  997.00  997.10  999.80  999.90 1001.00
              *
1                                        HEC-1 INPUT                                                    PAGE 62

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

2425          KK     D01BASIN
2426          KM        BASIN BOUNDARY FROM SUN CITY GRAND
2427          BA   1.564
2428          LG    0.21    0.26    5.10    0.33      24
2429          UI       0     130     179     482     645     784     929    1194    1657    1358
2430          UI    1107     924     751     601     413     231     214     143     128      40
2431          UI      41      40      40      40      41       0       0       0       0       0
2432          UI       0       0       0       0       0       0       0       0       0       0
2433          UI       0       0       0       0       0       0       0       0       0       0
              *

2434          KK  DD01REDIVERT
2435          KM        Master Drainage Report for Del Webb's Grand Avenue Property
2436          DT    RD01    97.0     0.0
2437          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2438          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2439          KK  D01D02ROUTE
2440          KM        Cross-section: Golf course, assumed 0.5% side slopes, V-ditch
2441          KM        Manning's N Value: golf course
2442          RS      17    FLOW
2443          RC   0.025   0.025   0.025    9289  0.0038    0.00
2444          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2445          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

2446          KK     D02BASIN
2447          KM        BASIN BOUNDARY FROM SUN CITY GRAND
2448          BA   1.844
2449          LG    0.21    0.26    5.40    0.29      28
2450          UI       0     170     295     687     895    1095    1371    1978    1914    1473
2451          UI    1195     973     750     439     296     239     169      91      52      52
2452          UI      53      52       0       0       0       0       0       0       0       0
2453          UI       0       0       0       0       0       0       0       0       0       0
2454          UI       0       0       0       0       0       0       0       0       0       0
              *

2455          KK  DD02REDIVERT
2456          KM        Master Drainage Report for Del Webb's Grand Avenue Property
2457          DT    RD02   125.6     0.0
2458          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2459          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2460          KK   CPD02COMBINE
2461          HC       3   4.757
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2462          KK  D02D10ROUTE
2463          KM        Cross-section: Channel is 2.5' deep with 25' bottom width
2464          KM        and has 4:1 side slopes per Mountain Vista Ranch Drainage Proposal
2465          KM        for Reems Road  / Manning's N Value: earth w/ sparse trees and brush
2466          RS       2    FLOW
2467          RC   0.022   0.022   0.022    5395  0.0037    0.00
2468          RX  100.00  102.50  105.00  110.00  120.00  125.00  127.50  130.00
2469          RY  1242.0 1241.00 1240.00 1238.00 1237.90 1240.00 1241.00 1242.00
              *

2470          KK     D09BASIN
2471          KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
2472          BA   0.265
2473          LG    0.25    0.25    5.70    0.24      35
2474          UI       0      39     152     229     337     460     321     222     136      67
2475          UI      42      16      12      12       0       0       0       0       0       0
2476          UI       0       0       0       0       0       0       0       0       0       0
2477          UI       0       0       0       0       0       0       0       0       0       0
2478          UI       0       0       0       0       0       0       0       0       0       0
              *

2479          KK  DD09REDIVERT
2480          KM        Drainage Report for Montain Vista Ranch
2481          DT    RD09    15.9     0.0
2482          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2483          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2484          KK  D09D10ROUTE
2485          KM        Cross-section: Estimated V-ditch w/ 4:1 side slopes
2486          KM        Manning's N Value: earth with grass, sparse trees and shrubs
2487          RS       1    FLOW
2488          RC   0.025   0.025   0.032    1657  0.0043    0.00
2489          RX  100.00  105.00  110.00  130.00  150.00  160.00  165.00  167.00
2490          RY  1000.0  999.90  999.80  996.80  996.70  998.70  999.80 1000.00
              *

2491          KK  DD06SERETRIEVE
2492          DR   DD06S
              *

2493          KK  D06D10ROUTE
2494          KM        Cross-section: From Final Drainage Report for Westfield Commons
2495          RS       1    FLOW
2496          RC   0.030   0.030   0.030    8002  0.0044    0.00
2497          RX  100.00  109.00  113.00  118.00  125.00  131.00  137.00  142.00
2498          RY  1240.0 1239.82 1238.04 1236.26 1236.16 1238.04 1239.60 1240.82
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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2499        KK     D10BASIN
2500        KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
2501        KM        COMMERCIAL DEVLP AND AG LANG
2502        BA   0.628
2503        LG    0.23     0.25     5.80     0.23       38
2504        UI       0       80      252      417      553      850      871      628      468      316
2505        UI     155      112       69       24       25       24        0        0        0        0
2506        UI       0        0        0        0        0        0        0        0        0        0
2507        UI       0        0        0        0        0        0        0        0        0        0
2508        UI       0        0        0        0        0        0        0        0        0        0
            *

2509        KK  DD10REDIVERT
2510        KM        Mountain Vista Ranch Drainage Proposal for Reems Road
2511        KM        Drainage Report for Montain Vista Ranch, Final Drainage Report Westfiel
2512        KM        Commons Final Drainage Report for Greenway & Reems, Final Drainage
2513        KM        Report for the Interim Condition for Westfield Commons Subd
2514        DT    RD10     44.8      0.0
2515        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2516        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

2517        KK   CPD10COMBINE
2518        HC       4     5.65
            *

2519        KK  D10D19ROUTE
2520        KM        Cross-section: Cross-section from Drainage Report for Channelization
2521        KM        of Reems Road (Report 691) / Manning's N Value: channel w/ grass
2522        KM        bottom and riprap sides
2523        RS       3     FLOW
2524        RC   0.022    0.022    0.022     5364   0.0027     0.00
2525        RX  100.00   107.60   115.20   122.80   130.80   138.40   146.00   153.60
2526        RY  1220.0 1218.00 1216.00 1214.00 1213.90 1216.00 1218.00 1220.00
            *

2527        KK     D08BASIN
2528        KM        BASIN BOUNDARY FROM LOOP 303 AND NORTHWEST RANCH
2529        BA   0.514
2530        LG    0.20     0.25     5.40     0.28       47
2531        UI       0       67      217      358      473      746      693      503      374      237
2532        UI     114       83       46       20       20       21        0        0        0        0
2533        UI       0        0        0        0        0        0        0        0        0        0
2534        UI       0        0        0        0        0        0        0        0        0        0
2535        UI       0        0        0        0        0        0        0        0        0        0
            *

2536        KK  DD08REDIVERT
2537        KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A on
2538        KM        Basin B/C same as Tract O), Final Drainage Report for Parcel 13 of
2539        KM        Surprise Farms (Tract O, P), Final Drainage Report for Surprise Farms
2540        KM        Parcel 9 (Tract K and 9), Final Drainage R
2541        DT    RD08     39.7      0.0
2542        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2543        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

2544        KK  D08D16ROUTE
2545        KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2546        KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2547        RS       5     FLOW
2548        RC   0.035    0.035    0.035     5348   0.0053     0.00
2549        RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
2550        RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
            *

2551        KK     D16BASIN
2552        KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
2553        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2554        KM        Manning's N Value: Ag. Field
2555        BA   0.517
2556        LG    0.11     0.25     4.90     0.41       79
2557        UI       0      181      588     1033     1071      644      272      132       36       34
2558        UI       0        0        0        0        0        0        0        0        0        0
2559        UI       0        0        0        0        0        0        0        0        0        0
2560        UI       0        0        0        0        0        0        0        0        0        0
2561        UI       0        0        0        0        0        0        0        0        0        0
            *

2562        KK  DD16REDIVERT
2563        KM        Additional Retention based on 100yr 2hr retention.
2564        KM        C value is based on future land use, P=2.7, A=acres
2565        DT    RD16     52.6      0.0
2566        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2567        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

2568        KK   CPD16COMBINE
2569        HC       2    1.031
            *

2570        KK   DD161DIVERT
2571        KM        Waddell at Sarival split flow
2572        DT  DD161S      0.0      0.0
2573        DI     0.0     52.0    492.4   1578.2   3317.0      0.0      0.0      0.0      0.0      0.0
2574        DQ     0.0     38.3    403.6   1166.1   2341.9      0.0      0.0      0.0      0.0      0.0
            *

2575        KK   DD162DIVERT
2576        KM        Waddell at Sarival split flow
2577        DT  DD162S      0.0      0.0
2578        DI     0.0     13.7     88.8    412.0    975.1      0.0      0.0      0.0      0.0      0.0
2579        DQ     0.0      7.4     32.2     66.7    108.7      0.0      0.0      0.0      0.0      0.0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2580        KK  D16D18ROUTE
2581        KM        Cross-section: Cross-section determined from aerial
2582        KM        Manning's N Value: street and ROW
2583        RS       9     FLOW
2584        RC   0.032    0.013    0.013     2183   0.0035     0.00
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```
2585          RX  100.00  101.00  102.00  148.00  148.10  176.00  177.00  178.00
2586          RY  1000.0  999.90  999.80  999.70  999.20  999.80  999.90 1000.00
              *

2587          KK     D18BASIN
2588          KM        BASIN BOUNDARY FROM LEGACY PARK
2589          BA   0.199
2590          LG   0.25    0.25    4.60    0.39      30
2591          UI      0      83     260     477     382     211      74      30      15       0
2592          UI      0       0       0       0       0       0       0       0       0       0
2593          UI      0       0       0       0       0       0       0       0       0       0
2594          UI      0       0       0       0       0       0       0       0       0       0
2595          UI      0       0       0       0       0       0       0       0       0       0
              *

2596          KK  DD18REDIVERT
2597          KM        Master Drainage Report for Legacy Parc (has excess retention)
2598          DT   RD18    17.2     0.0
2599          DI    0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2600          DQ    0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2601          KK   CPD18COMBINE
2602          HC       2    1.23
              *

2603          KK  D18D19ROUTE
2604          KM        Cross-section: Cross-section determined from aerial
2605          KM        Cross-section: Cross-section determined from aerial / Manning's N Value:
2606          RS       2    FLOW
2607          RC   0.032   0.013   0.013    2766  0.0024    0.00
2608          RX  100.00  101.00  132.50  133.00  133.10  151.00  152.00  153.00
2609          RY  1000.1 1000.00  999.50  999.40  998.90  999.30  999.40  999.50
              *

2610          KK     D17BASIN
2611          KM        BASIN BOUNDARY FROM LEGACY PARK
2612          BA   0.197
2613          LG   0.25    0.25    3.95    0.40      30
2614          UI      0      88     269     487     369     197      69      25      15       0
2615          UI      0       0       0       0       0       0       0       0       0       0
2616          UI      0       0       0       0       0       0       0       0       0       0
2617          UI      0       0       0       0       0       0       0       0       0       0
2618          UI      0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2619          KK  DD17REDIVERT
2620          KM        Master Drainage Report for Kenly Farms Subdivision, Master Drainage Repo
2621          KM        Legacy Parc (has excess retention)
2622          DT   RD17    16.5     0.0
2623          DI    0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2624          DQ    0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2625          KK  D17D19ROUTE
2626          KM        Cross-section: Cross-section from Drainage Report for Channelization of
2627          KM        Reems Road (Report 691) / Manning's N Value: channel w/ grass
2628          KM        bottom and riprap sides
2629          RS      18    FLOW
2630          RC   0.032   0.025   0.032    5422  0.0042    0.00
2631          RX  100.00  101.00  102.00  125.00  133.00  156.00  157.00  159.00
2632          RY  1000.0  999.90  999.80  993.80  993.70  999.80  999.90 1000.00
              *

2633          KK     D19BASIN
2634          KM        BASIN BOUNDARY FROM TASH, WADDEL SQUARE, LME,  AND SCHOOL
2635          BA   0.506
2636          LG   0.25    0.25    4.65    0.38      28
2637          UI      0      65     209     348     457     723     684     502     370     242
2638          UI    115      84      48      20      21      19       0       0       0       0
2639          UI      0       0       0       0       0       0       0       0       0       0
2640          UI      0       0       0       0       0       0       0       0       0       0
2641          UI      0       0       0       0       0       0       0       0       0       0
              *

2642          KK  DD19REDIVERT
2643          KM        Drainage Report for Greenway Parc at Surprise One, Final Drainage Report
2644          KM        Retail Center for Venture Development  SP06-411, Stormwater Management R
2645          KM        Jack in the Box, Final Drainage Report for Greenway Parc at Surprise Th
2646          KM        Report for Greenway Parc at Surprise Two, Drainage Report for Walgreens
2647          KM        Waddell & Reems Case # SPA04-297, Drainage Report for Waddell Square, F
2648          KM        Drainage Report for Waddell Square Phase 2-Wells Fargo, Final Drainage R
2649          KM        Waddell Square NWC Reems and Waddell, Final Drainage Report for Tash
2650          DT   RD19    40.2     0.0
2651          DI    0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2652          DQ    0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2653          KK   CPD19COMBINE
2654          HC       4   7.583
              *

2655          KK  D19D30ROUTE
2656          KM        Cross-section: Cross-section determined from
2657          KM        FEMA CLOMR submittal for Greer Ranch
2658          RS       3    FLOW
2659          RC   0.022   0.022   0.022    5320  0.0045    0.00
2660          RX  100.00  112.00  124.00  136.00  201.00  209.00  217.00  225.00
2661          RY  1194.0 1192.00 1190.00 1188.00 1187.90 1190.00 1192.00 1194.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2662          KK     D29BASIN
2663          KM        BASIN BOUNDARY FROM LOOP 303, AERIAL PHOTOGRAPHY
2664          KM        OF AG LAND AND FROM 1990 TOPO
2665          BA   0.509
2666          LG   0.10    0.25    4.60    0.47      79
2667          UI      0     184     595    1054    1040     621     251     120      34      34
2668          UI      0       0       0       0       0       0       0       0       0       0
2669          UI      0       0       0       0       0       0       0       0       0       0
2670          UI      0       0       0       0       0       0       0       0       0       0
2671          UI      0       0       0       0       0       0       0       0       0       0
              *
```

```
2672          KK  DD29REDIVERT
2673          KM        Additional Retention based on 100yr 2hr retention.
2674          KM        C value is based on future land use, P=2.7, A=acres
2675          DT    RD29     52.4      0.0
2676          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2677          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2678          KK   DD161RETRIEVE
2679          DR  DD161S
              *

2680          KK  D16D29ROUTE
2681          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2682          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2683          RS       12     FLOW
2684          RC   0.035    0.035    0.035     5295  0.0038     0.00
2685          RX   25.00    50.00    75.00    99.00  124.00   148.00   173.00   198.00
2686          RY  1000.0   999.50   999.00   993.00  993.05   999.00   999.50  1000.00
              *

2687          KK   CPD29COMBINE
2688          HC       2     1.54
              *

2689          KK  D29D30ROUTE
2690          KM        Cross-section: Cross-section determined from aerial
2691          KM        Manning's N Value: earth w/ grass
2692          RS       2     FLOW
2693          RC   0.025    0.025    0.025     4849  0.0054     0.00
2694          RX  100.00   103.00   106.00   108.00  112.00   114.00   135.50   153.50
2695          RY  1177.0  1176.50  1176.00  1175.00 1174.90  1176.00  1175.50  1176.90
              *

2696          KK     D30BASIN
2697          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT,
2698          KM        FCDMC, WESTERN BOUNDARY FROM LOOP 303
2699          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2700          BA   0.914
2701          LG    0.10     0.25     4.80     0.42       78
2702          UI       0      249      845     1333     1961     1298      770      322      165       54
2703          UI      53        0        0        0        0        0        0        0        0        0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2704          UI       0        0        0        0        0        0        0        0        0        0
2705          UI       0        0        0        0        0        0        0        0        0        0
2706          UI       0        0        0        0        0        0        0        0        0        0
              *

2707          KK  DD30REDIVERT
2708          KM        Additional Retention based on 100yr 2hr retention.
2709          KM        C value is based on future land use, P=2.7, A=acres
2710          DT    RD30     97.3      0.0
2711          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2712          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2713          KK   DD162RETRIEVE
2714          DR  DD162S
              *

2715          KK  D16D30ROUTE
2716          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2717          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2718          RS       22     FLOW
2719          RC   0.035    0.035    0.035     7187  0.0070     0.00
2720          RX   25.00    50.00    75.00    99.00  124.00   148.00   173.00   198.00
2721          RY  1000.0   999.50   999.00   993.00  993.05   999.00   999.50  1000.00
              *

2722          KK   CPD30COMBINE
2723          HC       4    9.006
              *

2724          KK  D30D46ROUTE
2725          KM        Cross-section: Cross-section determined from aerial
2726          KM        Manning's N Value: earth w/ sparse trees and brush
2727          RS       2     FLOW
2728          RC   0.022    0.022    0.022     5376  0.0045     0.00
2729          RX  100.00   112.00   124.00   136.00  201.00   209.00   217.00   225.00
2730          RY  1158.0  1156.00  1154.00  1152.00 1151.90  1154.00  1156.00  1158.00
              *

2731          KK     D45BASIN
2732          KM        BASIN BOUNDARY FROM SYCAMORE FARMS PARCELS,  WESTERN BOUNDARY
2733          KM        FROM LOOP 303, FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2734          BA   0.488
2735          LG    0.17     0.25     4.80     0.39       58
2736          UI       0      136      462      725     1058      686      400      162       81       29
2737          UI      28        0        0        0        0        0        0        0        0        0
2738          UI       0        0        0        0        0        0        0        0        0        0
2739          UI       0        0        0        0        0        0        0        0        0        0
2740          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2741          KK  DD45REDIVERT
2742          KM        Final Drainage Report for The Retreat at Sycamore Farms
2743          KM        Final Drainage Report for Sycamore Farms Parcel 13
2744          DT    RD45     43.6      0.0
2745          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2746          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2747          KK   DD451DIVERT
2748          KM        Peoria at Sarival split flow
2749          DT  DD451S      0.0      0.0
2750          DI     0.0    150.2    433.6    936.5  1656.8      0.0      0.0      0.0      0.0      0.0
2751          DQ     0.0     21.3     74.4    178.2   352.6      0.0      0.0      0.0      0.0      0.0
              *

2752          KK   DD452DIVERT
2753          KM        Peoria at Sarival split flow
2754          DT  DD452S      0.0      0.0
```

```
2755          DI     0.0   128.9   359.2   758.3  1304.2     0.0     0.0     0.0     0.0     0.0
2756          DQ     0.0    64.4   133.4   217.3   313.9     0.0     0.0     0.0     0.0     0.0
              *

2757          KK  D45D46ROUTE
2758          KM        Cross-section: Cross-section determined from aerial
2759          KM        Manning's N Value: earth w/ sparse trees and brush
2760          RS      11    FLOW
2761          RC   0.032   0.032   0.032    4898  0.0041    0.00
2762          RX  100.00  100.10  100.20  110.00  160.00  170.00  171.00  172.00
2763          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *

2764          KK     D46BASIN
2765          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT, FCDMC
2766          KM        GREER RANCH NORTH PHASES AND 1990 TOPO
2767          BA   0.918
2768          LG    0.23    0.24    4.70    0.36      34
2769          UI       0     100     241     463     594     779    1156    1053     821     628
2770          UI     471     283     170     126      88      30      31      30      31       0
2771          UI       0       0       0       0       0       0       0       0       0       0
2772          UI       0       0       0       0       0       0       0       0       0       0
2773          UI       0       0       0       0       0       0       0       0       0       0
              *

2774          KK  DD46REDIVERT
2775          KM        Preliminary Drainage Report for Greer Ranch North
2776          KM        Remaining retention volume estimated based on aerial
2777          DT    RD46    83.4     0.0
2778          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2779          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2780          KK   CPD46COMBINE
2781          HC       3  10.412
              *

2782          KK  D46D58ROUTE
2783          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
2784          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
2785          RS       2    FLOW
2786          RC   0.022   0.022   0.022    2200  0.0011    0.00
2787          RX    0.00    5.00   25.00   90.00  110.00  185.00  200.00  201.00
2788          RY  1146.0 1145.00 1144.50 1137.00 1136.90 1145.00 1145.00 1146.00
              *

2789          KK  RMSBSNDIVERT
2790          KM        Divet side weir flows into Reems Road Basin
2791          DT  SSPILL     0.0     0.0
2792          DI     0.0   371.0   512.0   724.0  1062.0  2173.0  2607.0  2728.0     0.0     0.0
2793          DQ     0.0   152.0    27.0   416.0   669.0  1501.0     0.0     0.0     0.0     0.0
              *

2794          KK  RMSBSNRETRIEVE
2795          DR  SSPILL
              *

2796          KK  SRREEMSTORAGE
2797          KM        Reems Road Basin
2798          KO
2799          RS       1    STOR
2800          SV           11.50   55.40  202.00  228.00  256.00
2801          SQ           12.50   38.00   76.20  129.00 1583.00
2802          SE  1125.0 1127.00 1129.50 1136.00 1137.00 1138.00
2803          ST
              *

2804          KK   CPRMSCOMBINE
2805          HC       2  10.412
              *

2806          KK    RRMSROUTE
2807          KM        Reems Road Channel
2808          RS       1    FLOW
2809          RC   0.035   0.035   0.035    1358  0.0011    0.00
2810          RX  100.00  105.00  130.00  190.00  210.00  270.00  285.00  290.00
2811          RY  1135.0 1124.00 1134.00 1127.00 1127.10 1134.50 1134.60 1135.00
              *

2812          KK     D57BASIN
2813          KM        BASIN BOUNDARYFROM LOOP 303
2814          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2815          BA   0.481
2816          LG    0.10    0.25    4.35    0.56      82
2817          UI       0     218     676    1222     886     455     163      56      36       0
2818          UI       0       0       0       0       0       0       0       0       0       0
2819          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2820          UI       0       0       0       0       0       0       0       0       0       0
2821          UI       0       0       0       0       0       0       0       0       0       0
              *

2822          KK  DD57REDIVERT
2823          KM        Additional Retention based on 100yr 2hr retention.
2824          KM        C value is based on future land use, P=2.7, A=acres
2825          DT    RD57    49.7     0.0
2826          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2827          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2828          KK   DD451RETRIEVE
2829          DR  DD451S
              *

2830          KK  D45D57ROUTE
2831          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
2832          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
2833          RS      11    FLOW
2834          RC   0.032   0.032   0.032    5208  0.0034    0.00
2835          RX  100.00  112.00  124.00  130.00  138.00  144.00  156.00  168.00
2836          RY  1156.0 1155.80 1155.50 1153.50 1153.60 1155.50 1155.80 1156.00
              *
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2837          KK   CPD57COMBINE
2838          HC       2   0.969
              *

2839          KK  D57D58ROUTE
2840          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
2841          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and shrubs; str
2842          RS       4    FLOW
2843          RC   0.032   0.032   0.013    4894  0.0047    0.00
2844          RX  100.00  101.00  324.00  340.00  348.00  360.00  375.00  390.00
2845          RY  1140.7 1140.30 1140.00 1137.00 1137.10 1140.00 1140.10 1140.70
              *

2846          KK     D58BASIN
2847          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2848          KM        AND TWELVE OAK ESTATES
2849          BA   0.919
2850          LG    0.21    0.25    4.70    0.39      42
2851          UI       0     153     612     904    1438    1547    1039     698     322     191
2852          UI      93      46      44       0       0       0       0       0       0       0
2853          UI       0       0       0       0       0       0       0       0       0       0
2854          UI       0       0       0       0       0       0       0       0       0       0
2855          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2856          KK  DD58REDIVERT
2857          KM        Additional Retention based on 100yr 2hr retention.
2858          KM        C value is based on future land use, P=2.7, A=acres
2859          DT    RD58    68.5     0.0
2860          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2861          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2862          KK   DD452RETRIEVE
2863          DR  DD452S
              *

2864          KK  D45D58ROUTE
2865          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2866          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2867          RS      12    FLOW
2868          RC   0.035   0.035   0.035    7224  0.0055    0.00
2869          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2870          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2871          KK   CPD58COMBINE
2872          HC       4  11.812
              *

2873          KK  D5869AROUTE
2874          KM        Cross-section: Cross-section determined from HEC-RAS
2875          KM        100% Channel Steady Model, Reems CLOMR,
2876          KM        given to HDR by FCDMC on May 5, 2009
2877          RS       2    FLOW
2878          RC   0.035   0.035   0.035    5296  0.0038    0.00
2879          RX  9932.0 9945.20 9964.30 9970.5010024.0010027.0010042.0010057.00
2880          RY  1120.5 1117.10 1113.80 1112.50 1112.40 1113.40 1117.00 1120.50
              *

2881          KK    D68ABASIN
2882          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2883          BA   0.242
2884          LG    0.19    0.25    4.10    0.58      58
2885          UI       0     431    1068     318      49       0       0       0       0       0
2886          UI       0       0       0       0       0       0       0       0       0       0
2887          UI       0       0       0       0       0       0       0       0       0       0
2888          UI       0       0       0       0       0       0       0       0       0       0
2889          UI       0       0       0       0       0       0       0       0       0       0
              *

2890          KK  DD68ARDIVERT
2891          KM        Additional Retention based on 100yr 2hr retention.
2892          KM        C value is based on future land use, P=2.7, A=acres
2893          DT   RD68A    23.7     0.0
2894          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2895          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE 74

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

2896          KK  68A69AROUTE
2897          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
2898          KM        on aerial & topo / Manning's N Value: clean earth; straight, street ROB
2899          RS      11    FLOW
2900          RC   0.025   0.025   0.025    4893  0.0030    0.00
2901          RX  1500.0 1501.00 1588.00 1600.00 1612.00 1630.00 1699.00 1700.00
2902          RY  1146.0 1145.00 1145.00 1142.00 1142.00 1145.00 1145.00 1146.00
              *

2903          KK    D69ABASIN
2904          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
2905          BA   0.463
2906          LG    0.21    0.25    4.55    0.44      40
2907          UI       0     258     770    1295     782     311     108      37       0       0
2908          UI       0       0       0       0       0       0       0       0       0       0
2909          UI       0       0       0       0       0       0       0       0       0       0
2910          UI       0       0       0       0       0       0       0       0       0       0
2911          UI       0       0       0       0       0       0       0       0       0       0
              *

2912          KK  DD69ARDIVERT
2913          KM        Additional Retention based on 100yr 2hr retention.
2914          KM        C value is based on future land use, P=2.7, A=acres
2915          DT   RD69A    37.7     0.0
2916          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2917          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2918          KK  CPD69ACOMBINE
2919          HC       3  12.517
              *

2920          KK  D69A70ROUTE
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2921          KM        Cross-section: Ag field, assumed 0.5% side slopes,
2922          KM        V-ditch / Manning's N Value: avg value for cultivated areas
2923          RS       8    FLOW
2924          RC   0.038   0.038   0.038    5072  0.0024    0.00
2925          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2926          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2927          KK     D68BASIN
2928          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM
2929          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2930          BA   0.252
2931          LG    0.09    0.24    4.10    0.63      76
2932          UI       0     228     735     665     237      60      25       0       0       0
2933          UI       0       0       0       0       0       0       0       0       0       0
2934          UI       0       0       0       0       0       0       0       0       0       0
2935          UI       0       0       0       0       0       0       0       0       0       0
2936          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2937          KK  DD68REDIVERT
2938          KM        Additional Retention based on 100yr 2hr retention.
2939          KM        C value is based on future land use, P=2.7, A=acres
2940          DT    RD68    24.9     0.0
2941          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2942          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2943          KK   DD681DIVERT
2944          KM        Northern at Sarival split flow
2945          DT  DD681S     0.0     0.0
2946          DI     0.0   250.0  1230.1  3091.5  6023.2     0.0     0.0     0.0     0.0     0.0
2947          DQ     0.0   197.3   899.3  2174.8  3885.3     0.0     0.0     0.0     0.0     0.0
              *

2948          KK   DD682DIVERT
2949          KM        Northern at Sarival split flow
2950          DT  DD682S     0.0     0.0
2951          DI     0.0    52.7   330.8   916.7  2137.9     0.0     0.0     0.0     0.0     0.0
2952          DQ     0.0    17.6    39.4    66.5    97.9     0.0     0.0     0.0     0.0     0.0
              *

2953          KK  D68D69ROUTE
2954          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
2955          KM        on aerial & topo / Manning's N Value: clean earth; straight, street ROB
2956          RS       7    FLOW
2957          RC   0.022   0.022   0.016    4930  0.0045    0.00
2958          RX  100.00  120.00  140.00  152.00  154.00  166.00  176.00  186.00
2959          RY  1121.2 1121.10 1121.00 1118.00 1118.10 1121.00 1121.10 1121.20
              *

2960          KK     D69BASIN
2961          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
2962          BA   0.462
2963          LG    0.22    0.24    4.60    0.42      37
2964          UI       0     111     384     588     951     692     442     203     109      44
2965          UI      25      26       0       0       0       0       0       0       0       0
2966          UI       0       0       0       0       0       0       0       0       0       0
2967          UI       0       0       0       0       0       0       0       0       0       0
2968          UI       0       0       0       0       0       0       0       0       0       0
              *

2969          KK  DD69REDIVERT
2970          KM        Additional Retention based on 100yr 2hr retention.
2971          KM        C value is based on future land use, P=2.7, A=acres
2972          DT    RD69    37.0     0.0
2973          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2974          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2975          KK   CPD69COMBINE
2976          HC       2   0.714
              *

2977          KK   DD691DIVERT
2978          KM        Northern at Reems split flow
2979          DT  DD691S     0.0     0.0
2980          DI     0.0  1524.4  3177.7  5722.7  8992.0     0.0     0.0     0.0     0.0     0.0
2981          DQ     0.0   127.3   360.0   873.5  1631.7     0.0     0.0     0.0     0.0     0.0
              *

2982          KK   DD692DIVERT
2983          KM        Northern at Reems split flow
2984          DT  DD692S     0.0     0.0
2985          DI     0.0  1397.1  2817.7  4849.3  7360.3     0.0     0.0     0.0     0.0     0.0
2986          DQ     0.0   102.5   198.8   314.3   446.2     0.0     0.0     0.0     0.0     0.0
              *

2987          KK  D69D70ROUTE
2988          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on aer
2989          KM        & topo / Manning's N Value: clean earth; straight, street ROB
2990          RS       6    FLOW
2991          RC   0.032   0.032   0.013    2823  0.0021    0.00
2992          RX  100.00  101.00  300.00  308.00  318.00  326.00  336.00  346.00
2993          RY  1102.5 1101.90 1101.80 1098.00 1098.10 1101.80 1102.00 1102.50
              *

2994          KK     D70BASIN
2995          KM        FALCON DUNES
2996          BA   0.259
2997          LG    0.10    0.25    4.80    0.47       6
2998          UI       0      83     345     495     437     287     158      83      48      31
2999          UI       8       7       8       7       8       0       0       0       0       0
3000          UI       0       0       0       0       0       0       0       0       0       0
3001          UI       0       0       0       0       0       0       0       0       0       0
3002          UI       0       0       0       0       0       0       0       0       0       0
              *

3003          KK  DD70REDIVERT
3004          KM        Additional Retention based on 100yr 2hr retention.
3005          KM        C value is based on future land use, P=2.7, A=acres
3006          DT    RD70     0.4     0.0
```

```
3007          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3008          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3009          KK    D70ABASIN
3010          KM        Basin bounded to south by Falcon Dunes
3011          BA   0.266
3012          LG    0.10    0.25    4.80    0.42      78
3013          UI       0     179     532     779     390     121      36       0       0       0
3014          UI       0       0       0       0       0       0       0       0       0       0
3015          UI       0       0       0       0       0       0       0       0       0       0
3016          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 77

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

3017          UI       0       0       0       0       0       0       0       0       0       0
              *

3018          KK  DD70ARDIVERT
3019          KM        Additional Retention based on 100yr 2hr retention.
3020          KM        C value is based on future land use, P=2.7, A=acres
3021          DT   RD70A    27.6     0.0
3022          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3023          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3024          KK  D70A70ROUTE
3025          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3026          KM        Manning's N Value: avg value for cultivated areas
3027          RS      15    FLOW
3028          RC   0.038   0.038   0.038    3363  0.0024    0.00
3029          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3030          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

3031          KK   CPD70COMBINE
3032          HC       4  13.756
              *

3033          KK   SRD70STORAGE
3034          KM        Falcon  Dunes. Storage recalc'd by FCDMC 3/2009
3035          KO
3036          RS       1    STOR
3037          SV            0.10    0.80    2.70    6.60   17.30   38.40   69.90  141.80  285.90
3038          SQ                                                   67.00  160.00  300.00  453.00
3039          SE  1079.0 1081.00 1083.00 1085.00 1087.00 1089.90 1092.50 1094.50 1097.00 1100.00
3040          ST
              *

3041          KK  D70D71ROUTE
3042          KM        Dysart Drain
3043          KM        As Built Plans FCD No 94-38, May 1995
3044          KM        Manning's N Value: concrete channel
3045          RS       1    FLOW
3046          RC   0.013   0.013   0.013    2520  0.0011    0.00
3047          RX  100.00  107.00  110.00  113.00  123.00  126.00  129.00  136.00
3048          RY  1094.5 1089.80 1087.80 1085.80 1085.70 1087.80 1089.80 1094.50
              *

3049          KK     D71BASIN
3050          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
3051          BA   0.241
3052          LG    0.11    0.24    4.80    0.41      70
3053          UI       0     166     491     706     347     106      30       0       0       0
3054          UI       0       0       0       0       0       0       0       0       0       0
3055          UI       0       0       0       0       0       0       0       0       0       0
3056          UI       0       0       0       0       0       0       0       0       0       0
3057          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3058          KK  DD71REDIVERT
3059          KM        Additional Retention based on 100yr 2hr retention.
3060          KM        C value is based on future land use, P=2.7, A=acres
3061          DT   RD71    22.5     0.0
3062          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3063          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3064          KK   CPD71COMBINE
3065          HC       2  13.997
              *

3066          KK  D71D72ROUTE
3067          KM        Dysart Drain
3068          KM        As Built Plans FCD No 94-38, May 1995
3069          KM        Manning's N Value: concrete channel
3070          RS       1    FLOW
3071          RC   0.013   0.013   0.013    2698  0.0011    0.00
3072          RX  100.00  109.00  112.00  115.00  139.00  142.00  145.00  152.50
3073          RY  1090.0 1084.00 1082.00 1080.00 1079.90 1082.00 1084.00 1089.00
              *

3074          KK     D59BASIN
3075          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
3076          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3077          BA   0.993
3078          LG    0.11    0.25    4.80    0.42      77
3079          UI       0     201     744    1116    1850    1564    1035     601     281     151
3080          UI      52      53       0       0       0       0       0       0       0       0
3081          UI       0       0       0       0       0       0       0       0       0       0
3082          UI       0       0       0       0       0       0       0       0       0       0
3083          UI       0       0       0       0       0       0       0       0       0       0
              *

3084          KK  DD59REDIVERT
3085          KM        Additional Retention based on 100yr 2hr retention.
3086          KM        C value is based on future land use, P=2.7, A=acres
3087          DT   RD59   105.1     0.0
3088          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3089          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3090          KK  DD47SERETRIEVE
3091          DR   DD47S
              *
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3092          KK  D47D59ROUTE
3093          KM        Cross-section: Cross-section determined from aerial & topo
3094          KM        Manning's N Value: clean earth; straight
3095          RS       5    FLOW
3096          RC   0.022   0.022   0.022    5274  0.0046    0.00
3097          RX  100.00  107.00  114.00  122.00  162.00  170.00  190.00  210.00
3098          RY  1118.5 1118.30 1118.00 1114.00 1114.40 1118.00 1118.30 1118.50
              *
1                                        HEC-1 INPUT                                                    PAGE 79

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


3099          KK   CPD59COMBINE
3100          HC       2   4.988
              *

3101          KK  DD59SEDIVERT
3102          KM        Olive at Bullard split flow
3103          DT   DD59S     0.0     0.0  .
3104          DI     0.0   578.9  2379.7  5553.1  9800.2     0.0     0.0     0.0     0.0     0.0
3105          DQ     0.0   549.4  2103.3  4574.6  7763.0     0.0     0.0     0.0     0.0     0.0
              *

3106          KK  D59D61ROUTE
3107          KM        Cross-section: Cross-section estimated from aerial and
3108          KM        topo-road / Manning's N Value: clean earth; straight, street ROB
3109          RS       8    FLOW
3110          RC   0.022   0.022   0.016    2759  0.0007    0.00
3111          RX  100.00  108.00  116.00  122.00  128.00  132.00  144.00  156.00
3112          RY  1113.0 1112.50 1112.00 1110.00 1110.10 1112.00 1112.30 1112.50
              *

3113          KK     D61BASIN
3114          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3115          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3116          BA   0.348
3117          LG    0.10    0.25    4.55    0.49      79
3118          UI       0      81     284     436     708     523     340     158      86      36
3119          UI      19      20       0       0       0       0       0       0       0       0
3120          UI       0       0       0       0       0       0       0       0       0       0
3121          UI       0       0       0       0       0       0       0       0       0       0
3122          UI       0       0       0       0       0       0       0       0       0       0
              *

3123          KK  DD61REDIVERT
3124          KM        Additional Retention based on 100yr 2hr retention.
3125          KM        C value is based on future land use, P=2.7, A=acres
3126          DT    RD61    37.6     0.0
3127          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3128          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3129          KK   CPD61COMBINE
3130          HC       2   5.336
              *

3131          KK  D6172AROUTE
3132          KM        Cross-section: Cross-section determined from ATSF.OUT
3133          KM        received from FCDMC on April 24, 2009-R181
3134          RS       2    FLOW
3135          RC   0.013   0.013   0.013    2640  0.0040    0.00
3136          RX    0.00   10.00   19.00   20.00   35.00   36.00   40.00   50.00
3137          RY  1104.0 1104.00 1104.00 1100.00 1100.00 1104.00 1104.00 1104.00
              *
1                                        HEC-1 INPUT                                                    PAGE 80

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


3138          KK    D71ABASIN
3139          KM        Boundary based on Northern Parkway DCR and AT&SF CAR
3140          BA   0.236
3141          LG    0.10    0.25    4.80    0.43      80
3142          UI       0     158     472     692     346     107      32       0       0       0
3143          UI       0       0       0       0       0       0       0       0       0       0
3144          UI       0       0       0       0       0       0       0       0       0       0
3145          UI       0       0       0       0       0       0       0       0       0       0
3146          UI       0       0       0       0       0       0       0       0       0       0
              *

3147          KK  DD71ARDIVERT
3148          KM        Additional Retention based on 100yr 2hr retention.
3149          KM        C value is based on future land use, P=2.7, A=acres
3150          DT   RD71A    25.9     0.0
3151          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3152          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3153          KK  DD59SERETRIEVE
3154          DR   DD59S
              *

3155          KK  D5971AROUTE
3156          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3157          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3158          RS       6    FLOW
3159          RC   0.035   0.035   0.035    5372  0.0037    0.00
3160          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3161          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3162          KK  CPD71ACOMBINE
3163          HC       2   5.224
              *

3164          KK  71A72AROUTE
3165          KM        Cross-section: Cross-section determined from ATSF.OUT
3166          KM        received from FCDMC on April 24, 2009-R194D
3167          RS       3    FLOW
3168          RC   0.025   0.025   0.025    2643  0.0030    0.00
3169          RX  1500.0 1501.00 1588.00 1600.00 1612.00 1630.00 1699.00 1700.00
3170          RY  1102.0 1101.00 1101.00 1098.00 1098.00 1101.00 1101.00 1102.00
              *

3171          KK    D72ABASIN
3172          KM        Boundary based on AT&SF CAR
3173          BA   0.254
3174          LG    0.10    0.25    4.70    0.44      79
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3175          UI       0     170     509     744     372     116      34       0       0       0
3176          UI       0       0       0       0       0       0       0       0       0       0
3177          UI       0       0       0       0       0       0       0       0       0       0
3178          UI       0       0       0       0       0       0       0       0       0       0
3179          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3180          KK  DD72ARDIVERT
3181          KM        Additional Retention based on 100yr 2hr retention.
3182          KM        C value is based on future land use, P=2.7, A=acres
3183          DT   RD72A    27.7     0.0
3184          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3185          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3186          KK  CPD72ACOMBINE
3187          HC       3   5.826
              *

3188          KK  D72A72ROUTE
3189          KM        Cross-section: Cross-section determined from ATSF.OUT
3190          KM        received from FCDMC on April 24, 2009-R195B
3191          RS       1    FLOW
3192          RC   0.013   0.013   0.013    2738  0.0040    0.00
3193          RX    0.00   10.00   20.00   28.00   43.00   51.00   60.00   70.00
3194          RY  1100.0 1100.00 1100.00 1096.00 1096.00 1100.00 1100.00 1100.00
              *

3195          KK     D72BASIN
3196          KM        Dysart Drain
3197          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3198          KM        1990 TOPO AND BNSF RR ALIGNMENT
3199          BA   0.264
3200          LG    0.10    0.24    4.70    0.43      74
3201          UI       0     182     554     771     374     112      31       0       0       0
3202          UI       0       0       0       0       0       0       0       0       0       0
3203          UI       0       0       0       0       0       0       0       0       0       0
3204          UI       0       0       0       0       0       0       0       0       0       0
3205          UI       0       0       0       0       0       0       0       0       0       0
              *

3206          KK  DD72REDIVERT
3207          KM        Additional Retention based on 100yr 2hr retention.
3208          KM        C value is based on future land use, P=2.7, A=acres
3209          DT    RD72    26.7     0.0
3210          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3211          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3212          KK   CPD72COMBINE
3213          HC       3  20.087
              *

3214          KK  D72D73ROUTE
3215          KM        Dysart Drain
3216          KM        As Built Plans FCD No 94-38, May 1995
3217          KM        Manning's N Value: concrete channel
3218          RS       1    FLOW
3219          RC   0.013   0.013   0.013    3001  0.0045    0.00
3220          RX  100.00  112.00  116.00  120.00  128.00  132.00  136.00  148.00
3221          RY  1086.5 1080.50 1078.50 1076.50 1076.40 1078.50 1080.50 1086.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3222          KK     D73BASIN
3223          KM        Boundray based on Northern Parkway DCR and AT&SF CAR
3224          BA   0.280
3225          LG    0.15    0.25    4.65    0.42      56
3226          UI       0      85     282     464     600     380     201      84      37      17
3227          UI      17       0       0       0       0       0       0       0       0       0
3228          UI       0       0       0       0       0       0       0       0       0       0
3229          UI       0       0       0       0       0       0       0       0       0       0
3230          UI       0       0       0       0       0       0       0       0       0       0
              *

3231          KK  DD73REDIVERT
3232          KM        Additional Retention based on 100yr 2hr retention.
3233          KM        C value is based on future land use, P=2.7, A=acres
3234          DT    RD73    24.2     0.0
3235          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3236          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3237          KK   CPD73COMBINE
3238          HC       2  20.367
              *

3239          KK  D73D78ROUTE
3240          KM        Dysart Drain
3241          KM        As Built Plans FCD No 94-38, May 1995
3242          KM        Manning's N Value: concrete channel
3243          RS       1    FLOW
3244          RC   0.013   0.013   0.013    8062  0.0019    0.00
3245          RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
3246          RY  1073.0 1068.30 1064.30 1060.30 1060.20 1064.30 1068.30 1073.00
              *

3247          KK     B02BASIN
3248          KM        BASIN BOUNDARY FROM LUKE AFB HOUSING AND DYSART DRAIN
3249          BA   0.543
3250          LG    0.21    0.25    4.80    0.38      39
3251          UI       0      73     255     407     552     868     697     512     370     190
3252          UI     119      75      25      22      23       0       0       0       0       0
3253          UI       0       0       0       0       0       0       0       0       0       0
3254          UI       0       0       0       0       0       0       0       0       0       0
3255          UI       0       0       0       0       0       0       0       0       0       0
              *

3256          KK  DB02REDIVERT
3257          KM        Retention volume estimated based on aerial
3258          DT    RB02    20.7     0.0
3259          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3260          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
```

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

3261            KK  DB02SDDIVERT
3262            KM        DIVERT FROM GLENDALE TO DYSART DRAIN PER LUKE AFB
3263            KM        CAR BY HDR DATED OCTOBER 2004 FCD CONTRACT NO 2003C018
3264            DT  DB02LR     0.0     0.0
3265            DI     0.0   200.0   400.0   800.0   832.0  1200.0  5000.0     0.0     0.0     0.0
3266            DQ     0.0     0.0     0.0     0.0     0.0   368.0  4168.0     0.0     0.0     0.0
                *

3267            KK     B04BASIN
3268            KM        BASIN BOUNDARY FROM CAPISTRANO NORTH AND SOUTH
3269            KM        CASITAS BONITAS, LAFB HOUSING AND 1990 TOPO
3270            BA   0.315
3271            LG    0.23    0.25    4.60    0.40      38
3272            UI       0     500    1344     495      79       0       0       0       0       0
3273            UI       0       0       0       0       0       0       0       0       0       0
3274            UI       0       0       0       0       0       0       0       0       0       0
3275            UI       0       0       0       0       0       0       0       0       0       0
3276            UI       0       0       0       0       0       0       0       0       0       0
                *

3277            KK  DB04REDIVERT
3278            KM        Preliminary Drainage Report for Capistrano North
3279            KM        Drainage Report for Dysart Estates, Remaining
3280            KM        Retention Volume estimated from aerial
3281            DT    RB04    14.2     0.0
3282            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3283            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

3284            KK  B04B02ROUTE
3285            KM        Cross-section: Route taken along Thunderbird Rd, with walls on either si
3286            RS       7    FLOW
3287            RC   0.016   0.016   0.016    6392  0.0011    0.00
3288            RX  100.00  101.00  124.00  124.10  184.00  184.10  207.00  208.00
3289            RY  1090.0 1082.00 1081.90 1081.40 1081.30 1081.90 1082.00 1090.00
                *

3290            KK  DB02SDRETRIEVE
3291            DR  DB02LR
                *

3292            KK   CPB02COMBINE
3293            HC       2   0.858
                *

3294            KK  LR02SDDIVERT
3295            KM        DIVERT FROM LITCHFIELD RD FOR NEW STORM DRAIN
3296            KM        SYSTEM PER LUKE AFB CAR BY HDR DATED OCTOBER
3297            KM        2004 FCD CONTRACT NO 2003C018
3298            DT  LR02LR     0.0     0.0
3299            DI     0.0   200.0   400.0   800.0  1426.0  1500.0  5000.0     0.0     0.0     0.0
3300            DQ     0.0     0.0     0.0     0.0     0.0    74.0  3574.0     0.0     0.0     0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3301            KK  LR2D78ROUTE
3302            KM        Cross-section: As-builts for Dysart Drain Improvements Project
3303            KM        Reems Rd to Agua Fria River Channel Improvements FCD No 94-38,
3304            KM        LAFB No 87-3002 dated May 1995, from Litchfield Rd to Dysart Rd-No4
3305            RS       1    FLOW
3306            RC   0.013   0.013   0.013    8400  0.0019    0.00
3307            RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
3308            RY  1073.0 1068.30 1064.30 1060.30 1060.20 1064.30 1068.30 1073.00
                *

3309            KK    D78BBASIN
3310            KM        Boundary based on Northern Parkway DCR and AT&SF CAR
3311            BA   0.531
3312            LG    0.10    0.25    4.70    0.44      75
3313            UI       0      60     158     292     374     507     731     586     453     339
3314            UI     240     125      93      60      27      19      18      19       0       0
3315            UI       0       0       0       0       0       0       0       0       0       0
3316            UI       0       0       0       0       0       0       0       0       0       0
3317            UI       0       0       0       0       0       0       0       0       0       0
                *

3318            KK  DD78BRDIVERT
3319            KM        Additional Retention based on 100yr 2hr retention.
3320            KM        C value is based on future land use, P=2.7, A=acres
3321            DT   RD78B    56.5     0.0
3322            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3323            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

3324            KK  CPD78BCOMBINE
3325            HC       5  32.084
                *

3326            KK  78B79BROUTE
3327            KM        Dysart Drain,As Built Plans FCD No 94-38, May 1995
3328            KM        Manning's N Value: concrete channel
3329            RS       2    FLOW
3330            RC   0.013   0.013   0.013    3524  0.0009    0.00
3331            RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
3332            RY  1068.0 1062.30 1058.30 1054.30 1054.20 1058.30 1062.30 1068.00
                *

3333            KK     D51BASIN
3334            KM        BASIN BOUNDARY FROM DYSART RANCHETTES AND DYSART HIGH SCHOOL
3335            BA   0.287
3336            LG    0.30    0.15    7.60    0.11      18
3337            UI       0      76     261     406     613     410     251     104      58      17
3338            UI      16       0       0       0       0       0       0       0       0       0
3339            UI       0       0       0       0       0       0       0       0       0       0
3340            UI       0       0       0       0       0       0       0       0       0       0
3341            UI       0       0       0       0       0       0       0       0       0       0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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3342          KK  DD51REDIVERT
3343          KM        Retention volume estimated based on aerial
3344          DT    RD51      5.9      0.0
3345          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3346          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3347          KK  D51D65ROUTE
3348          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
3349          KM        aerial & topo / Manning's N Value: clean earth; straight
3350          RS      10    FLOW
3351          RC   0.038    0.038    0.038     5303   0.0032     0.00
3352          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
3353          RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *

3354          KK     D65BASIN
3355          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
3356          BA   0.695
3357          LG    0.10     0.25     5.00     0.39       44
3358          UI       0      242      781     1367     1445      876      374      178       54       45
3359          UI       0        0        0        0        0        0        0        0        0        0
3360          UI       0        0        0        0        0        0        0        0        0        0
3361          UI       0        0        0        0        0        0        0        0        0        0
3362          UI       0        0        0        0        0        0        0        0        0        0
              *

3363          KK  DD65REDIVERT
3364          KM        Additional Retention based on 100yr 2hr retention.
3365          KM        C value is based on future land use, P=2.7, A=acres
3366          DT    RD65     70.8      0.0
3367          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3368          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3369          KK   CPD65COMBINE
3370          HC       2    0.982
              *

3371          KK  D65D75ROUTE
3372          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3373          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3374          RS       6    FLOW
3375          RC   0.035    0.035    0.035     5972   0.0020     0.00
3376          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
3377          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
              *

3378          KK    D79ABASIN
3379          KM        Boundray based on Aerial and Topo
3380          BA   0.175
3381          LG    0.12     0.25     4.70     0.43       68
3382          UI       0      108      326      511      273       90       29       15        0        0
3383          UI       0        0        0        0        0        0        0        0        0        0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3384          UI       0        0        0        0        0        0        0        0        0        0
3385          UI       0        0        0        0        0        0        0        0        0        0
3386          UI       0        0        0        0        0        0        0        0        0        0
              *

3387          KK  DD79ARDIVERT
3388          KM        Additional Retention based on 100yr 2hr retention.
3389          KM        C value is based on future land use, P=2.7, A=acres
3390          DT   RD79A     19.1      0.0
3391          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3392          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3393          KK     D75BASIN
3394          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3395          KM        1990 TOPO, LUKE INDUSTRIAL PARK, CONTECT CONSTRUCTION PRODUCTS
3396          BA   0.883
3397          LG    0.11     0.25     4.80     0.42       47
3398          UI       0      203      720     1083     1784     1339      863      419      220       97
3399          UI      48       48        0        0        0        0        0        0        0        0
3400          UI       0        0        0        0        0        0        0        0        0        0
3401          UI       0        0        0        0        0        0        0        0        0        0
3402          UI       0        0        0        0        0        0        0        0        0        0
              *

3403          KK  DD75REDIVERT
3404          KM        Additional Retention based on 100yr 2hr retention.
3405          KM        C value is based on future land use, P=2.7, A=acres
3406          DT    RD75     70.4      0.0
3407          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3408          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3409          KK   CPD75COMBINE
3410          HC       3    2.04
              *

3411          KK   SRD75STORAGE
3412          KM        PONDING EITHER NORTH OR SOUTH OF NORTHERN PARKWAY,
3413          KM        OUTLET PIPE IS 2-36"""", SR198 PER ATSF.OUT
3414          KO
3415          RS       1    STOR
3416          SV            3.00     7.00    12.00    17.00    22.00    27.00    32.00
3417          SQ           16.00    40.00    76.00   104.00   304.00   674.00  1096.00
3418          SE  1076.0  1077.00  1078.00  1079.00  1080.00  1081.00  1082.00  1083.00
3419          ST
              *

3420          KK  D7579BROUTE
3421          KM        Cross-section: Cross-section determined from ATSF.OUT
3422          KM        received from FCDMC on April 24, 2009-R198
3423          RS       6    FLOW
3424          RC   0.030    0.025    0.030     4196   0.0029     0.00
3425          RX  1000.0  1050.00  1070.00  1090.00  1090.00  1220.00  1230.00  1270.00
3426          RY  1083.0  1082.00  1078.00  1076.00  1076.00  1078.00  1080.00  1083.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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3427          KK    D79BBASIN
3428          KM        BASIN BOUNDARY FROM THE GLENDALE SALT DEVELOPMENT
3429          KM        1990 TOPO AND DYSART DRAIN
3430          BA   0.317
3431          LG    0.10    0.25    4.65    0.47      66
3432          UI       0     111     360     634     656     395     168      80      23      20
3433          UI       0       0       0       0       0       0       0       0       0       0
3434          UI       0       0       0       0       0       0       0       0       0       0
3435          UI       0       0       0       0       0       0       0       0       0       0
3436          UI       0       0       0       0       0       0       0       0       0       0
              *

3437          KK  DD79BRDIVERT
3438          KM        Additional Retention based on 100yr 2hr retention.
3439          KM        C value is based on future land use, P=2.7, A=acres
3440          DT   RD79B    28.2     0.0
3441          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3442          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3443          KK  CPD79BCOMBINE
3444          HC       3  34.441
              *

3445          KK  D79B80ROUTE
3446          KM        Dysart Drain
3447          KM        As Built Plans FCD No 94-38, May 1995
3448          KM        Manning's N Value: concrete channel
3449          RS       1    FLOW
3450          RC   0.013   0.013   0.013    1044  0.0009    0.00
3451          RX  100.00  109.30  117.30  125.30  135.30  143.30  151.30  160.70
3452          RY  1064.5 1059.80 1055.80 1051.80 1051.70 1055.80 1059.80 1064.50
              *

3453          KK     D80BASIN
3454          KM        BASIN BOUNDARY FROM 1990 TOPO AND DYSART DRAIN
3455          BA   0.131
3456          LG    0.16    0.25    4.45    0.49      49
3457          UI       0     145     457     309      80      17       0       0       0       0
3458          UI       0       0       0       0       0       0       0       0       0       0
3459          UI       0       0       0       0       0       0       0       0       0       0
3460          UI       0       0       0       0       0       0       0       0       0       0
3461          UI       0       0       0       0       0       0       0       0       0       0
              *

3462          KK  DD80REDIVERT
3463          KM        Additional Retention based on 100yr 2hr retention.
3464          KM        C value is based on future land use, P=2.7, A=acres
3465          DT    RD80     9.5     0.0
3466          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3467          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE 88

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

3468          KK   CPD80COMBINE
3469          HC       2  34.572
              *

3470          KK     B01BASIN
3471          KM        BASIN BOUNDARY FROM AMERICAN SAND AND ROCK INC
3472          KM        EL MIRAGE ROAD LLC, DYSART DRAIN AND AGUA FRIA RIVER
3473          BA   0.096
3474          LG    0.14    0.25    4.35    0.53      50
3475          UI       0     137     387     176      34       0       0       0       0       0
3476          UI       0       0       0       0       0       0       0       0       0       0
3477          UI       0       0       0       0       0       0       0       0       0       0
3478          UI       0       0       0       0       0       0       0       0       0       0
3479          UI       0       0       0       0       0       0       0       0       0       0
              *

3480          KK   DUMMYCOMBINE
3481          HC       3
              *

3482          KK     B03BASIN
3483          KM        BASIN BOUNDARY FROM GLENDALE SALT DEVELOPMENT
3484          KM        1990 TOPO AND DYSART DRAIN
3485          BA   0.338
3486          LG    0.17    0.25    4.70    0.41      53
3487          UI       0     140     436     806     648     364     130      52      24       0
3488          UI       0       0       0       0       0       0       0       0       0       0
3489          UI       0       0       0       0       0       0       0       0       0       0
3490          UI       0       0       0       0       0       0       0       0       0       0
3491          UI       0       0       0       0       0       0       0       0       0       0
              *

3492          KK  DB03REDIVERT
3493          KM        Additional Retention based on 100yr 2hr retention.
3494          KM        C value is based on future land use, P=2.7, A=acres
3495          DT    RB03    30.6     0.0
3496          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3497          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3498          KK  B03B05ROUTE
3499          KM        Cross section estimated from topo
3500          RS       6    FLOW
3501          RC   0.035   0.035   0.035    2746  0.0080    0.00
3502          RX  100.00  135.00  175.00  190.00  210.00  235.00  260.00  300.00
3503          RY  1074.0 1073.00 1072.00 1071.00 1070.00 1068.00 1069.00 1071.00
              *

3504          KK     B05BASIN
3505          KM        BASIN BOUNDARY FROM DYSART DRAIN, GLENDALE SALT DEVELOPMENT
3506          KM        AND 1990 TOPO
3507          BA   0.395
3508          LG    0.14    0.25    4.65    0.45      58
3509          UI       0      96     337     516     825     584     369     164      91      33
1                                        HEC-1 INPUT                                          PAGE 89

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

3510          UI      22       0       0       0       0       0       0       0       0       0
3511          UI       0       0       0       0       0       0       0       0       0       0
3512          UI       0       0       0       0       0       0       0       0       0       0
3513          UI       0       0       0       0       0       0       0       0       0       0
              *
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3514        KK  DB05REDIVERT
3515        KM        Additional Retention based on 100yr 2hr retention.
3516        KM        C value is based on future land use, P=2.7, A=acres
3517        DT    RB05     26.6      0.0
3518        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3519        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

3520        KK   CPB05COMBINE
3521        HC       2    0.733
            *

3522        KK  B05B06ROUTE
3523        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
3524        KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
3525        RS       4     FLOW
3526        RC   0.032   0.032    0.032     4011   0.0040     0.00
3527        RX  100.00   150.00   167.00   179.00   214.00   226.00   255.00   277.00
3528        RY  1039.0 1038.50 1038.00 1035.00 1035.10 1038.00 1038.30 1038.50
            *

3529        KK     B06BASIN
3530        KM        BASIN BOUNDARY ROCK QUARRY AND AGUA FRIA RIVER
3531        BA   0.400
3532        LG    0.20     0.25     3.92     0.41       40
3533        UI       0      132      426      731      856      519      241      110       40       26
3534        UI       0        0        0        0        0        0        0        0        0        0
3535        UI       0        0        0        0        0        0        0        0        0        0
3536        UI       0        0        0        0        0        0        0        0        0        0
3537        UI       0        0        0        0        0        0        0        0        0        0
            *

3538        KK  DB06REDIVERT
3539        KM        Additional Retention based on 100yr 2hr retention.
3540        KM        C value is based on future land use, P=2.7, A=acres
3541        DT    RB06     10.0      0.0
3542        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3543        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

3544        KK   CPB06COMBINE
3545        HC       2    1.133
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3546        KK  B06B15ROUTE
3547        KM        Cross-section: Estimated 4:1 side slopes, width based on
3548        KM        aerial / Manning's N Value: clean earth; straight
3549        RS       6     FLOW
3550        RC   0.022    0.022    0.022     6376   0.0025     0.00
3551        RX  100.00   101.00   222.00   238.00   250.00   264.00   283.00   284.00
3552        RY  1033.0 1032.25 1032.00 1030.00 1030.10 1032.00 1032.25 1033.00
            *

3553        KK     B07BASIN
3554        KM        BASIN BOUNDARY FROM LUKE AFT ESTATES, DESERT GARDENS IV
3555        KM        AND LAFB BOUNDARY
3556        BA   0.246
3557        LG    0.27     0.25     4.90     0.31       19
3558        UI       0       37      145      215      322      428      292      205      121       63
3559        UI      36       14       11       11        0        0        0        0        0        0
3560        UI       0        0        0        0        0        0        0        0        0        0
3561        UI       0        0        0        0        0        0        0        0        0        0
3562        UI       0        0        0        0        0        0        0        0        0        0
            *

3563        KK  DB07REDIVERT
3564        KM        Preliminary Drainage Report for Luke Ranch
3565        KM        Remaining retention volume estimated from aerial
3566        DT    RB07     22.0      0.0
3567        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3568        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

3569        KK  B07B09ROUTE
3570        KM        Cross-section: Estimated 4' deep and 6:1 side slopes, width based
3571        KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
3572        RS       1     FLOW
3573        RC   0.032    0.032    0.032     3559   0.0020     0.00
3574        RX  100.00   106.00   112.00   136.00   160.00   184.00   194.00   204.00
3575        RY  1070.0 1069.50 1069.00 1065.00 1065.10 1069.00 1069.50 1070.00
            *

3576        KK     B08BASIN
3577        KM        BASIN BOUNDARY FROM LAFB BOUNDARY, 1990 TOPO
3578        KM        MOBILE HOME PARK AND DREAMING SUMMIT DEVELOPMENT
3579        BA   0.231
3580        LG    0.10     0.25     4.70     0.44       57
3581        UI       0      537     1049      176        0        0        0        0        0        0
3582        UI       0        0        0        0        0        0        0        0        0        0
3583        UI       0        0        0        0        0        0        0        0        0        0
3584        UI       0        0        0        0        0        0        0        0        0        0
3585        UI       0        0        0        0        0        0        0        0        0        0
            *
```



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

3586        KK  DB08REDIVERT
3587        KM        Preliminary Drainage Report for Luke Ranch, Additional
3588        KM        Retention based on 100yr 2hr retention.
3589        KM        C value is based on future land use, P=2.7, A=acres
3590        DT    RB08     24.8      0.0
3591        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3592        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

3593        KK  B08B09ROUTE
3594        KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
3595        KM        aerial & topo / Manning's N Value: grass sides, concrete bottom
3596        RS       9     FLOW
3597        RC   0.025    0.016    0.025     3184   0.0016     0.00
3598        RX  100.00   107.00   114.00   118.00   133.00   137.00   157.00   167.00
3599        RY  1070.0 1069.50 1069.00 1067.00 1067.10 1069.00 1069.50 1070.00
            *
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```
3600        KK     B09BASIN
3601        KM        BASIN BOUNDARY FROM DREAMING SUMMIT MULTI PHASE
3602        BA   0.430
3603        LG    0.24    0.25    5.00    0.33      33
3604        UI       0     266     787    1245     677     235      73      36       0       0
3605        UI       0       0       0       0       0       0       0       0       0       0
3606        UI       0       0       0       0       0       0       0       0       0       0
3607        UI       0       0       0       0       0       0       0       0       0       0
3608        UI       0       0       0       0       0       0       0       0       0       0
            *

3609        KK  DB09REDIVERT
3610        KM        Final Drainage Report for Dreaming Summit
3611        KM        Unit 1 (75% retention used), Final Drainage Report
3612        KM        Dreaming Summit Unit 2A
3613        DT    RB09    20.0     0.0
3614        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3615        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

3616        KK   CPB09COMBINE
3617        HC       3   0.907
            *

3618        KK   SRB11STORAGE
3619        KM        Litchfield Park Detention Facility, Infrastructure from
3620        KM        Dreaming Summit Master Drainage Report
3621        KO
3622        RS       1    STOR
3623        SV             2.24   11.46   25.91   43.25   61.13   79.80   98.97  119.35  140.75
3624        SQ             5.00   18.00   37.00   58.00   79.00   92.00  104.00  115.00  125.00
3625        SE   1058.0 1059.00 1060.00 1061.00 1062.00 1063.00 1064.00 1065.00 1066.00 1067.00
3626        ST
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3627        KK  B09B11ROUTE
3628        KM        Cross-section: Estimated 3' deep; side slopes and width based on
3629        KM        aerial and topo / Manning's N Value: semi-natural wash w/ vegetation
3630        RS      12    FLOW
3631        RC   0.035   0.035   0.035    5810  0.0022    0.00
3632        RX  100.00  107.00  112.00  118.00  130.00  137.00  143.00  154.00
3633        RY  1058.0 1057.00 1056.00 1055.50 1055.00 1056.00 1058.00 1060.00
            *

3634        KK     B10BASIN
3635        KM        BASIN BOUNDARY FROM 1990 TOPO, DREAMING SUMMIT AND FALCON PLAZA
3636        BA   0.162
3637        LG    0.10    0.25    4.50    0.51      49
3638        UI       0     159     510     410     131      31       0       0       0       0
3639        UI       0       0       0       0       0       0       0       0       0       0
3640        UI       0       0       0       0       0       0       0       0       0       0
3641        UI       0       0       0       0       0       0       0       0       0       0
3642        UI       0       0       0       0       0       0       0       0       0       0
            *

3643        KK  DB10REDIVERT
3644        KM        Final Drainage Report for Dreaming Summit Unit 1 (75%
3645        KM        retention used), Final Drainage Report Dreaming Summit Unit 2A,
3646        KM        Additional Retention based on 100yr 2hr retention.
3647        KM        C value is based on future land use, P=2.7, A=acres
3648        DT    RB10    16.4     0.0
3649        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3650        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

3651        KK  B1011AROUTE
3652        KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3653        KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
3654        RS      12    FLOW
3655        RC   0.022   0.022   0.022    3609  0.0060    0.00
3656        RX  100.00  107.50  119.50  125.50  129.00  135.00  147.00  154.50
3657        RY  1056.6 1055.30 1053.30 1052.30 1051.90 1053.30 1055.30 1056.60
            *

3658        KK  B1011BROUTE
3659        KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3660        KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
3661        RS      16    FLOW
3662        RC   0.022   0.022   0.022    2760  0.0017    0.00
3663        RX  100.00  103.90  115.90  127.90  172.90  184.90  196.90  200.80
3664        RY  1051.9 1051.20 1049.20 1047.20 1046.80 1049.20 1051.20 1051.90
            *

3665        KK     B11BASIN
3666        KM        BASIN BOUNDARY FROM DREAMING SUMMIT, FALCON PLAZA AND COLTER CHANNEL
3667        BA   0.821
3668        LG    0.24    0.24    4.80    0.36      30
3669        UI       0     188     670    1007    1659    1245     802     390     204      91
3670        UI      44      45       0       0       0       0       0       0       0       0
```

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

3671        UI       0       0       0       0       0       0       0       0       0       0
3672        UI       0       0       0       0       0       0       0       0       0       0
3673        UI       0       0       0       0       0       0       0       0       0       0
            *

3674        KK  DB11REDIVERT
3675        KM        Final Drainage Report for Dreaming Summit
3676        KM        Unit 1 Retention Basin 1
3677        KM        Dreaming Summit Unit 2B Retention Basin for Commercial Site
3678        DT    RB11    11.1     0.0
3679        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3680        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

3681        KK   CPB11COMBINE
3682        HC       3    1.89
            *

3683        KK  B11B12ROUTE
3684        KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3685        KM        August 1993, From Dysart Rd to Wigwam Creek Rd-74+00
3686        RS       1    FLOW
```

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3687          RC   0.022   0.022   0.022    3516  0.0017    0.00
3688          RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
3689          RY  1046.0 1044.30 1042.30 1040.30 1039.90 1042.30 1044.30 1046.00
              *

3690          KK     B12BASIN
3691          KM        BASIN BOUNDARY FROM LOC CERROS, LITCHFILED VISTA VIEWS MULTI PHASE
3692          KM        WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
3693          BA   0.381
3694          LG    0.28     0.24     4.45     0.44       17
3695          UI       0       52      176      279      378      605      491      364      263      139
3696          UI      86       51       21       15       16        0        0        0        0        0
3697          UI       0        0        0        0        0        0        0        0        0        0
3698          UI       0        0        0        0        0        0        0        0        0        0
3699          UI       0        0        0        0        0        0        0        0        0        0
              *

3700          KK  DB12REDIVERT
3701          KM        Retention volume estimated based on aerial
3702          DT    RB12      1.8      0.0
3703          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3704          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3705          KK   CPB12COMBINE
3706          HC       2    2.271
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3707          KK  B12B14ROUTE
3708          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3709          KM        August 1993, From Wigwam Creek Rd to El Mirage-99+00
3710          RS       1     FLOW
3711          RC   0.022   0.022   0.022    1682  0.0021    0.00
3712          RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
3713          RY  1036.6 1034.90 1032.90 1030.90 1030.50 1032.90 1034.90 1036.60
              *

3714          KK     B13BASIN
3715          KM        BASIN BOUNDARY FROM WIGWAM CREEK PH 2, DYSART VILLAGE
3716          KM        BETHANY ESTATES NORTH AND 1990 TOPO
3717          BA   0.489
3718          LG    0.28     0.25     4.60     0.37       15
3719          UI       0       92      347      518      850      798      525      334      148       89
3720          UI      32       25       25        0        0        0        0        0        0        0
3721          UI       0        0        0        0        0        0        0        0        0        0
3722          UI       0        0        0        0        0        0        0        0        0        0
3723          UI       0        0        0        0        0        0        0        0        0        0
              *

3724          KK  DB13REDIVERT
3725          KM        Additional Retention based on 100yr 2hr retention.
3726          KM        C value is based on future land use, P=2.7, A=acres
3727          DT    RB13     23.4      0.0
3728          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3729          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3730          KK  B13B14ROUTE
3731          KM        Cross-section: Estimated 4' deep and 4:1 side slopes,
3732          KM        width based on aerial / Manning's N Value: grass
3733          RS       4     FLOW
3734          RC   0.025   0.025   0.025    4696  0.0030    0.00
3735          RX  100.00  108.00  116.00  136.00  166.00  186.00  196.00  206.00
3736          RY  1040.0 1039.50 1039.00 1035.00 1035.10 1039.00 1039.50 1040.00
              *

3737          KK     B14BASIN
3738          KM        BASIN BOUNDARY FROM WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
3739          BA   0.328
3740          LG    0.25     0.24     4.60     0.39       34
3741          UI       0       69      251      374      627      508      338      189       90       47
3742          UI      17       18        0        0        0        0        0        0        0        0
3743          UI       0        0        0        0        0        0        0        0        0        0
3744          UI       0        0        0        0        0        0        0        0        0        0
3745          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3746          KK  DB14REDIVERT
3747          KM        Final Drainage Report for Wigwam Creek Ph. 1
3748          KM        (60% retention used), Remaining retention volume
3749          KM        estimated from aerial
3750          DT    RB14     24.5      0.0
3751          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3752          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3753          KK   CPB14COMBINE
3754          HC       3    3.088
              *

3755          KK  B14B15ROUTE
3756          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
3757          KM        August 1993, From El Mirage to AFR-99+00
3758          RS       1     FLOW
3759          RC   0.022   0.022   0.022    2696  0.0016    0.00
3760          RX  100.00  112.00  118.00  124.00  238.00  244.00  250.00  262.00
3761          RY  1027.0 1025.00 1024.00 1023.00 1022.90 1024.00 1025.00 1027.00
              *

3762          KK     B15BASIN
3763          KM        BASIN BOUNDARY FROM ROCK QUARRY, COLTER CHANNEL AND AGUA FRIA RIVER
3764          BA   0.376
3765          LG    0.14     0.24     4.45     0.49       52
3766          UI       0       86      307      461      760      570      367      179       93       41
3767          UI      21       21        0        0        0        0        0        0        0        0
3768          UI       0        0        0        0        0        0        0        0        0        0
3769          UI       0        0        0        0        0        0        0        0        0        0
3770          UI       0        0        0        0        0        0        0        0        0        0
              *

3771          KK   CPB15COMBINE
3772          HC       3    4.597
```

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                *
3773            KK     B16BASIN
3774            KM        BASIN BOUNDARY FROM SUN HEALTH PROPERTIES AND 1990 TOPO
3775            BA   0.113
3776            LG    0.10    0.25    4.25    0.60      43
3777            UI       0     115     369     280      84      19       0       0       0       0
3778            UI       0       0       0       0       0       0       0       0       0       0
3779            UI       0       0       0       0       0       0       0       0       0       0
3780            UI       0       0       0       0       0       0       0       0       0       0
3781            UI       0       0       0       0       0       0       0       0       0       0
                *

3782            KK  DB16REDIVERT
3783            KM        Retention volume estimated based on aerial
3784            DT    RB16     6.9     0.0
3785            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3786            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3787            KK  B16B17ROUTE
3788            KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
3789            KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 65+00
3790            RS       1    FLOW
3791            RC   0.013   0.013   0.013    5250  0.0015    0.00
3792            RX  100.00  102.00  106.00  110.00  115.00  119.00  123.00  125.00
3793            RY  1038.3 1037.30 1035.30 1033.30 1033.20 1035.30 1037.30 1038.30
                *

3794            KK     B17BASIN
3795            KM        BASIN BOUNDARY FROM VERANDA MULTI PHASE, DYSART COMMONS
3796            KM        CAMBELBACK PLACE AT DYSART AND COLTER CHANNEL
3797            BA   0.334
3798            LG    0.16    0.25    4.80    0.39      51
3799            UI       0     103     347     576     726     441     220      96      39      20
3800            UI       0       0       0       0       0       0       0       0       0       0
3801            UI       0       0       0       0       0       0       0       0       0       0
3802            UI       0       0       0       0       0       0       0       0       0       0
3803            UI       0       0       0       0       0       0       0       0       0       0
                *

3804            KK  DB17REDIVERT
3805            KM        Retention volume estimated based on aerial
3806            DT    RB17    18.8     0.0
3807            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3808            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

3809            KK   CPB17COMBINE
3810            HC       2   0.447
                *

3811            KK  B17B18ROUTE
3812            KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
3813            KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 115+00
3814            RS       2    FLOW
3815            RC   0.013   0.013   0.013    5176  0.0032    0.00
3816            RX  100.00  102.00  106.00  110.00  115.00  119.00  123.00  125.00
3817            RY  1028.4 1027.40 1025.40 1023.40 1023.30 1025.40 1027.40 1028.40
                *

3818            KK     B18BASIN
3819            KM        BASIN BOUNDARY FROM CAMELBACK CROSSING, TIERRA BUENA
3820            KM        WIGWAM CREEK AND COLTER CHANNEL
3821            BA   0.282
3822            LG    0.22    0.25    4.55    0.41      36
3823            UI       0      59     216     322     539     436     291     162      78      41
3824            UI      14      16       0       0       0       0       0       0       0       0
3825            UI       0       0       0       0       0       0       0       0       0       0
3826            UI       0       0       0       0       0       0       0       0       0       0
3827            UI       0       0       0       0       0       0       0       0       0       0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3828            KK  DB18REDIVERT
3829            KM        Final Drainage Report for Wigwam Creek Ph. 1 (40% retention used)
3830            DT    RB18    20.6     0.0
3831            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3832            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

3833            KK   CPB18COMBINE
3834            HC       2   0.729
                *

3835            KK  B18B19ROUTE
3836            KM        Cross-section: Cross-section determined from aerial and
3837            KM        1990 topo / Manning's N Value: earth w/ sparse trees and brush
3838            RS       2    FLOW
3839            RC   0.032   0.032   0.032    3218  0.0053    0.00
3840            RX  100.00  104.00  108.00  124.00  142.00  157.00  179.00  193.00
3841            RY  1026.0 1026.00 1022.00 1020.00 1020.00 1022.00 1022.00 1022.10
                *

3842            KK     B19BASIN
3843            KM        BASIN BOUNDARY FROM ROCK QUARY, COLTER CHANNEL AND AGUA FRIA RIVER
3844            BA   0.117
3845            LG    0.15    0.25    4.40    0.51      55
3846            UI       0     156     456     232      48       0       0       0       0       0
3847            UI       0       0       0       0       0       0       0       0       0       0
3848            UI       0       0       0       0       0       0       0       0       0       0
3849            UI       0       0       0       0       0       0       0       0       0       0
3850            UI       0       0       0       0       0       0       0       0       0       0
                *

3851            KK   CPB19COMBINE
3852            HC       2   0.846
                *

3853            KK     B20BASIN
3854            KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
3855            BA   0.228
3856            LG    0.15    0.25    4.15    0.59      55
```

```
3857          UI       0     161     487     669     311      96      25       0       0       0
3858          UI       0       0       0       0       0       0       0       0       0       0
3859          UI       0       0       0       0       0       0       0       0       0       0
3860          UI       0       0       0       0       0       0       0       0       0       0
3861          UI       0       0       0       0       0       0       0       0       0       0
              *

3862          KK   DUMMYCOMBINE
3863          HC       4
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3864          KK     B21BASIN
3865          KM        BASIN BOUNDARY FROM RIO CROSSING AND WIGWAM CREEK
3866          BA   0.243
3867          LG    0.23    0.25    4.20    0.52      41
3868          UI       0      54     195     292     486     369     241     122      62      29
3869          UI      13      14       0       0       0       0       0       0       0       0
3870          UI       0       0       0       0       0       0       0       0       0       0
3871          UI       0       0       0       0       0       0       0       0       0       0
3872          UI       0       0       0       0       0       0       0       0       0       0
              *

3873          KK  DB21REDIVERT
3874          KM        Final Drainage Report for Rio Crossing
3875          DT    RB21    21.9     0.0
3876          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3877          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3878          KK  B21B22ROUTE
3879          KM        Cross-section: Estimated channel, 2' depth, width based on
3880          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
3881          RS       6    FLOW
3882          RC   0.032   0.032   0.032    1942  0.0082    0.00
3883          RX  100.00  108.00  116.00  128.00  136.00  148.00  156.00  164.00
3884          RY  1010.0 1009.50 1009.00 1007.00 1007.10 1009.00 1009.50 1010.00
              *

3885          KK     B22BASIN
3886          KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
3887          BA   0.217
3888          LG    0.14    0.24    4.00    0.62      55
3889          UI       0     185     588     595     225      61      21       0       0       0
3890          UI       0       0       0       0       0       0       0       0       0       0
3891          UI       0       0       0       0       0       0       0       0       0       0
3892          UI       0       0       0       0       0       0       0       0       0       0
3893          UI       0       0       0       0       0       0       0       0       0       0
              *

3894          KK  DB22REDIVERT
3895          KM        Additional Retention based on 100yr 2hr retention.
3896          KM        C value is based on future land use, P=2.7, A=acres
3897          DT    RB22     1.4     0.0
3898          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3899          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3900          KK   CPB22COMBINE
3901          HC       2    0.46
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3902          KK     B23BASIN
3903          KM        BASIN BOUNDARY FROM WIGWAM CREEK
3904          BA   0.269
3905          LG    0.25    0.25    6.00    0.21      35
3906          UI       0      38     138     214     300     454     335     243     166      78
3907          UI      51      28      12      12      12       0       0       0       0       0
3908          UI       0       0       0       0       0       0       0       0       0       0
3909          UI       0       0       0       0       0       0       0       0       0       0
3910          UI       0       0       0       0       0       0       0       0       0       0
              *

3911          KK  DB23REDIVERT
3912          KM        Drainage Report for Wigwam Creek
3913          KM        South Offsites (50% area)
3914          DT    RB23     2.1     0.0
3915          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3916          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3917          KK  B23B24ROUTE
3918          KM        Cross-section: Assumed 2% cross slope from crown of road,
3919          KM        0.5' curb height / Manning's N Value: street and curb
3920          RS       1    FLOW
3921          RC   0.032   0.013   0.032    2557  0.0051    0.00
3922          RX  100.00  100.50  124.00  124.50  175.00  175.50  197.50  198.00
3923          RY  1025.0 1024.50 1024.00 1023.50 1023.40 1024.00 1024.50 1025.00
              *

3924          KK     B24BASIN
3925          KM        BASIN BOUNDARY FROM CORTE SIERRA
3926          BA   0.188
3927          LG    0.23    0.24    4.20    0.54      38
3928          UI       0      73     233     422     371     215      82      35      13       0
3929          UI       0       0       0       0       0       0       0       0       0       0
3930          UI       0       0       0       0       0       0       0       0       0       0
3931          UI       0       0       0       0       0       0       0       0       0       0
3932          UI       0       0       0       0       0       0       0       0       0       0
              *

3933          KK  DB24REDIVERT
3934          KM        Master Drainage and Grading Plans for Corte
3935          KM        Sierra Unit 1 and Unit 2 (50% area)
3936          DT    RB24    12.6     0.0
3937          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3938          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3939          KK   CPB24COMBINE
3940          HC       2   0.457
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3941          KK  B24B25ROUTE
3942          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
3943          KM        based on aerial / Manning's N Value: earth w/ sparse trees and brush
3944          RS       3    FLOW
3945          RC   0.032   0.032   0.032    3303  0.0012    0.00
3946          RX  100.00  108.00  116.00  128.00  134.00  146.00  154.00  162.00
3947          RY  1011.5 1011.30 1011.00 1008.00 1008.10 1011.00 1013.50 1014.00
              *

3948          KK     B25BASIN
3949          KM        BASIN BOUNDARY FROM 1990 TOPO
3950          BA   0.203
3951          LG    0.18    0.24    4.15    0.58      42
3952          UI       0     116     350     577     334     128      42      16       0       0
3953          UI       0       0       0       0       0       0       0       0       0       0
3954          UI       0       0       0       0       0       0       0       0       0       0
3955          UI       0       0       0       0       0       0       0       0       0       0
3956          UI       0       0       0       0       0       0       0       0       0       0
              *

3957          KK  DB25REDIVERT
3958          KM        Additional Retention based on 100yr 2hr retention.
3959          KM        C value is based on future land use, P=2.7, A=acres
3960          DT    RB25    10.7     0.0
3961          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3962          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3963          KK   CPB25COMBINE
3964          HC       2    0.66
              *

3965          KK     B26BASIN
3966          KM        BASIN BOUNDARY FROM CORTE SIERRA
3967          BA   0.308
3968          LG    0.23    0.24    4.50    0.42      38
3969          UI       0     114     363     649     627     368     149      69      21      21
3970          UI       0       0       0       0       0       0       0       0       0       0
3971          UI       0       0       0       0       0       0       0       0       0       0
3972          UI       0       0       0       0       0       0       0       0       0       0
3973          UI       0       0       0       0       0       0       0       0       0       0
              *

3974          KK  DB26REDIVERT
3975          KM        Master Drainage and Grading Plans for Corte
3976          KM        Sierra Unit 1 and Unit 2 (50% area), Final Drainage
3977          KM        Report for Las Palmeras West
3978          DT    RB26    17.5     0.0
3979          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3980          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3981          KK  B26B27ROUTE
3982          KM        Cross-section: Estimated 2' deep and 6:1 side slopes, width
3983          KM        based on aerial / Manning's N Value: clean earth; straight; ROB street
3984          RS       7    FLOW
3985          RC   0.032   0.022   0.013    2653  0.0008    0.00
3986          RX  100.00  101.00  340.00  352.00  356.00  368.00  378.00  388.00
3987          RY  996.75  996.25  996.00  994.00  994.10  996.00  996.25  996.75
              *

3988          KK     B27BASIN
3989          KM        BASIN BOUNDARY FROM CORTE SIERRA AND 1990 TOPO
3990          BA   0.363
3991          LG    0.15    0.25    4.50    0.48      54
3992          UI       0      78     281     422     705     563     369     197      98      48
3993          UI      19      20       0       0       0       0       0       0       0       0
3994          UI       0       0       0       0       0       0       0       0       0       0
3995          UI       0       0       0       0       0       0       0       0       0       0
3996          UI       0       0       0       0       0       0       0       0       0       0
              *

3997          KK   CPB27COMBINE
3998          HC       2   0.671
              *

3999          KK   DUMMYCOMBINE
4000          HC       4
              *

4001          KK     B76BASIN
4002          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4003          BA   0.386
4004          LG    0.18    0.25    4.15    0.60      24
4005          UI       0      55     204     316     441     665     476     340     228     106
4006          UI      70      36      17      17      17       0       0       0       0       0
4007          UI       0       0       0       0       0       0       0       0       0       0
4008          UI       0       0       0       0       0       0       0       0       0       0
4009          UI       0       0       0       0       0       0       0       0       0       0
              *

4010          KK  DB76REDIVERT
4011          KM        Retention volume estimated based on aerial
4012          DT    RB76    52.4     0.0
4013          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4014          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4015          KK  B7676AROUTE
4016          KM        Cross-section: Estimated based on aerial, street section
4017          KM        Manning's N Value: street, earth with sparse trees and shrubs
4018          RS       1    FLOW
4019          RC   0.032   0.016   0.032    3516  0.0057    0.00
4020          RX  100.00  110.00  120.00  122.00  158.00  160.00  170.00  180.00
4021          RY  1020.5 1020.30 1020.00 1019.50 1019.40 1019.90 1020.30 1020.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4022          KK     B75BASIN
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4023          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4024          BA   0.418
4025          LG    0.19     0.25     4.35     0.53       20
4026          UI       0      119      411      648      910      577      322      131       63       25
4027          UI      26        0        0        0        0        0        0        0        0        0
4028          UI       0        0        0        0        0        0        0        0        0        0
4029          UI       0        0        0        0        0        0        0        0        0        0
4030          UI       0        0        0        0        0        0        0        0        0        0
              *

4031          KK  DB75REDIVERT
4032          KM        Master Drainage Study for Palm Valley (CONCEPT
4033          KM        DESIGN VOLUME OF 550 AC-FT RECOMMENDED)
4034          KM        Remaining retention volume estimated from aerial
4035          DT    RB75     52.3      0.0
4036          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4037          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4038          KK  B75A75ROUTE
4039          KM        Cross-section: Estimated based on aerial, street section
4040          KM        Manning's N Value: street, earth with sparse trees and shrubs
4041          RS       1    FLOW
4042          RC   0.025    0.025    0.025     5478   0.0026     0.00
4043          RX  100.00   107.00   114.00   114.10   155.00   155.10   165.00   171.00
4044          RY  1000.0   999.90   999.80   999.30   999.20   999.80   999.90  1000.00
              *

4045          KK    B75ABASIN
4046          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4047          BA   0.281
4048          LG    0.23     0.23     6.20     0.20       26
4049          UI       0       57      207      315      516      446      295      173       81       44
4050          UI      15       14        0        0        0        0        0        0        0        0
4051          UI       0        0        0        0        0        0        0        0        0        0
4052          UI       0        0        0        0        0        0        0        0        0        0
4053          UI       0        0        0        0        0        0        0        0        0        0
              *

4054          KK  CPB75ACOMBINE
4055          HC       2    0.699
              *

4056          KK  B7576AROUTE
4057          KM        Cross-section: Estimated based on aerial, street section
4058          KM        Manning's N Value: street and ROW
4059          RS       1    FLOW
4060          RC   0.032    0.013    0.032     2062   0.0015     0.00
4061          RX  100.00   100.50   110.00   110.10   147.00   147.10   164.50   165.00
4062          RY  1000.9  1000.00   999.80   999.30   999.31   999.80  1000.00  1000.90
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4063          KK    B76ABASIN
4064          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4065          BA   0.314
4066          LG    0.19     0.24     4.10     0.59       38
4067          UI       0      186      553      904      509      184       59       26        0        0
4068          UI       0        0        0        0        0        0        0        0        0        0
4069          UI       0        0        0        0        0        0        0        0        0        0
4070          UI       0        0        0        0        0        0        0        0        0        0
4071          UI       0        0        0        0        0        0        0        0        0        0
              *

4072          KK  CPB76ACOMBINE
4073          HC       3    1.399
              *

4074          KK  B76A78ROUTE
4075          KM        Cross-section: assumed 9' headwall to keep flow from
4076          KM        overflowing into canal, width from aerial / Manning's
4077          KM        N Value: concrete
4078          RS       1    FLOW
4079          RC   0.016    0.016    0.016      171   0.0117     0.00
4080          RX  100.00   101.00   102.00   103.00   163.00   164.00   165.00   166.00
4081          RY  1009.0  1008.90  1008.80  1000.00  1000.10  1008.80  1008.90  1009.00
              *

4082          KK     B77BASIN
4083          KM        WIGWAM CREEK
4084          BA   0.826
4085          LG    0.22     0.16     7.00     0.15       28
4086          UI       0      128      528      774     1202     1424      951      657      327      187
4087          UI     102       40       39        0        0        0        0        0        0        0
4088          UI       0        0        0        0        0        0        0        0        0        0
4089          UI       0        0        0        0        0        0        0        0        0        0
4090          UI       0        0        0        0        0        0        0        0        0        0
              *

4091          KK  DB77REDIVERT
4092          KM        Drainage Report for Wigwam Creek
4093          KM        South Offsites (50% retention volume used)
4094          DT    RB77     32.1      0.0
4095          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4096          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4097          KK  B77B78ROUTE
4098          KM        Cross-section: Estimated 3' deep, 1' fb, included wall, width based on
4099          KM        aerial / Manning's N Value: earth with sparse trees and shrubs
4100          RS       8    FLOW
4101          RC   0.032    0.032    0.032     8404   0.0012     0.00
4102          RX  100.00   110.00   134.00   154.00   170.00   190.00   200.00   200.50
4103          RY  1001.0  1000.50  1000.00   996.00   996.10  1000.00  1001.00  1001.10
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4104          KK     B78BASIN
4105          KM        DYSART RANCH
4106          BA   0.570
4107          LG    0.20     0.24     5.80     0.24       46
4108          UI       0       51       89      204      271      334      404      589      599      461
4109          UI     377      306      237      152       91       80       52       36       16       16
4110          UI      16       16       15        0        0        0        0        0        0        0
```

```
4111          UI       0       0       0       0       0       0       0       0       0       0
4112          UI       0       0       0       0       0       0       0       0       0       0
              *

4113          KK  DB78REDIVERT
4114          KM        Final Drainage Report for Sage Creek
4115          DT    RB78    27.2     0.0
4116          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4117          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4118          KK  CPB78ACOMBINE
4119          HC       2   1.396
              *

4120          KK  DB78BNDIVERT
4121          KM        Est from RID Overchute Design Report for Basin #4
4122          KM        based on overchute plans. 23ac-ft in Basin #4 shown on plans.
4123          DT  RB78BN    18.4     0.0
4124          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4125          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4126          KK  CPB78BCOMBINE
4127          HC       2   2.795
              *

4128          KK  B78B79ROUTE
4129          KM        Cross-section: golf course, assumed 0.5% side slopes,
4130          KM        V-ditch / Manning's N Value: grass - golf course
4131          RS       9    FLOW
4132          RC   0.025   0.025   0.025    6489  0.0022    0.00
4133          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4134          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4135          KK     B79BASIN
4136          KM        BASIN BOUNDARY FROM RID CANAL, FULTON ESTATES
4137          KM        LITCHFIELD, AND PALM VALLEY PH 1
4138          BA   0.848
4139          LG    0.23    0.25    5.60    0.29      36
4140          UI       0     119     441     678     951    1444    1051     763     517     240
4141          UI     159      88      37      37      37       0       0       0       0       0
4142          UI       0       0       0       0       0       0       0       0       0       0
4143          UI       0       0       0       0       0       0       0       0       0       0
4144          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4145          KK  DB79REDIVERT
4146          KM        Drainage Report for Fulton Estates
4147          DT    RB79    39.7     0.0
4148          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4149          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4150          KK   CPB79COMBINE
4151          HC       2   3.643
              *

4152          KK  B79B80ROUTE
4153          KM        Cross-section: golf course, assumed 0.5% side slopes,
4154          KM        V-ditch / Manning's N Value: grass - golf course
4155          RS       2    FLOW
4156          RC   0.025   0.025   0.025    1200  0.0033    0.00
4157          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4158          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4159          KK     B80BASIN
4160          KM        PALM VALLEY PHASE 1
4161          BA   0.266
4162          LG    0.21    0.25    4.80    0.38      32
4163          UI       0      51     193     292     480     426     283     171      77      46
4164          UI      14      13      14       0       0       0       0       0       0       0
4165          UI       0       0       0       0       0       0       0       0       0       0
4166          UI       0       0       0       0       0       0       0       0       0       0
4167          UI       0       0       0       0       0       0       0       0       0       0
              *

4168          KK  DB80REDIVERT
4169          KM        Retention volume estimated based on aerial
4170          DT    RB80    21.4     0.0
4171          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4172          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4173          KK   CPB80COMBINE
4174          HC       2   3.909
              *

4175          KK   SRB80STORAGE
4176          KM        Storage at Palm Valley golf course cart path
4177          KO
4178          RS       1    STOR
4179          SV            6.61   16.70   34.00
4180          SQ          607.40 3236.62 7036.41
4181          SE  996.00  998.00 1000.00
4182          ST
              *
1                                        HEC-1 INPUT                                          PAGE106

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

4183          KK  B80B81ROUTE
4184          KM        Cross-section: golf course, assumed 0.5% side slopes,
4185          KM        V-ditch / Manning's N Value: grass - golf course
4186          RS       4    FLOW
4187          RC   0.025   0.025   0.025    1746  0.0011    0.00
4188          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4189          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4190          KK     B81BASIN
4191          KM        PALM VALLEY PHASE 1
4192          BA   0.252
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4193          LG    0.17    0.17    6.80    0.18      26
4194          UI       0      57     204     307     503     384     249     122      64      29
4195          UI      13      14       0       0       0       0       0       0       0       0
4196          UI       0       0       0       0       0       0       0       0       0       0
4197          UI       0       0       0       0       0       0       0       0       0       0
4198          UI       0       0       0       0       0       0       0       0       0       0
              *

4199          KK  DB81REDIVERT
4200          KM        Retention volume estimated based on aerial
4201          DT    RB81     2.4     0.0
4202          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4203          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4204          KK   CPB81COMBINE
4205          HC       2   4.161
              *

4206          KK   SRB81STORAGE
4207          KM        Storage at McDowell Road culvert
4208          KO
4209          RS       1    STOR
4210          SV           2.20    9.46   29.91
4211          SQ         114.77  324.61 2290.53
4212          SE  992.00  994.00  996.00  998.00
4213          ST
              *

4214          KK  B81B84ROUTE
4215          KM        Cross-section: Estimated from aerial, assumed 2' depth / Manning's
4216          KM        N Value: earth with sparse trees and shrubs (main channel),
4217          KM        clean earth (left and right bank)
4218          RS       1    FLOW
4219          RC   0.022   0.032   0.022    2092  0.0077    0.00
4220          RX  100.00  101.00  145.00  150.00  160.00  165.00  219.00  220.00
4221          RY  1000.2 1000.10  996.40  996.00  995.90  996.30 1000.10 1000.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4222          KK     B82BASIN
4223          KM        PALM VALLEY PHASE 1
4224          BA   0.149
4225          LG    0.19    0.25    5.30    0.31      29
4226          UI       0      38     132     202     313     219     134      58      32      11
4227          UI       8       0       0       0       0       0       0       0       0       0
4228          UI       0       0       0       0       0       0       0       0       0       0
4229          UI       0       0       0       0       0       0       0       0       0       0
4230          UI       0       0       0       0       0       0       0       0       0       0
              *

4231          KK  DB82REDIVERT
4232          KM        Retention volume estimated based on aerial
4233          DT    RB82    11.1     0.0
4234          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4235          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4236          KK  B82B83ROUTE
4237          KM        Cross-section: cross-section estimated from aerial, est
4238          KM        1' deep / Manning's N Value: clean straight earth
4239          RS      21    FLOW
4240          RC   0.022   0.022   0.022    1687  0.0095    0.00
4241          RX  100.00  105.00  115.00  135.00  136.00  155.00  160.00  170.00
4242          RY  1000.2 1000.10 1000.00  999.00  999.10 1000.00 1000.10 1000.20
              *

4243          KK     B83BASIN
4244          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
4245          BA   0.223
4246          LG    0.10    0.25    6.00    0.26      62
4247          UI       0     259     800     507     126      27       0       0       0       0
4248          UI       0       0       0       0       0       0       0       0       0       0
4249          UI       0       0       0       0       0       0       0       0       0       0
4250          UI       0       0       0       0       0       0       0       0       0       0
4251          UI       0       0       0       0       0       0       0       0       0       0
              *

4252          KK  DB83REDIVERT
4253          KM        Retention volume estimated based on aerial
4254          DT    RB83     5.4     0.0
4255          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4256          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4257          KK   CPB83COMBINE
4258          HC       2   0.372
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4259          KK   SRB83STORAGE
4260          KM        ADOT Regional Basin (per URS 2001 study)
4261          KO
4262          RS       1    STOR
4263          SV          19.83   60.59  109.71  161.17  215.52  334.65  399.54  399.64  399.74
4264          SQ          36.00   44.00   52.00   60.00   65.00   76.00   81.00   86.00   87.00
4265          SE  970.50  974.00  976.00  978.00  980.00  982.00  986.00  988.00  990.00  990.50
4266          ST
              *

4267          KK  B83B84ROUTE
4268          KM        Cross-section: Cross-section determined from aerial and
4269          KM        1990 topo / Manning's N Value: clean straight earth
4270          RS       2    FLOW
4271          RC   0.022   0.022   0.022     680  0.0010    0.00
4272          RX  100.00  142.00  160.00  191.00  231.00  258.00  269.00  281.00
4273          RY  988.00  986.00  984.00  976.00  976.10  984.00  986.00  988.00
              *

4274          KK     B71BASIN
4275          KM        BASIN BOUNDARY FROM PALM VALLEY CONCEPT DRAINAGE PLAN
4276          KM        PV PHASE 3A AND 38, SUNRISE
4277          BA   0.959
4278          LG    0.24    0.26    4.50    0.43      34
```

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4279          UI       0     108     268     508     654     865    1280    1081     828     633
4280          UI     466     246     179     112      68      32      33      33       0       0
4281          UI       0       0       0       0       0       0       0       0       0       0
4282          UI       0       0       0       0       0       0       0       0       0       0
4283          UI       0       0       0       0       0       0       0       0       0       0
              *

4284          KK  DB71REDIVERT
4285          KM        Palm Valley Concept Drainage Plan for the Roosevelt
4286          KM        Canal Watershed (conceptual retention required
4287          KM        volume used, no design plans available)
4288          DT    RB71    73.5     0.0
4289          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4290          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4291          KK  B71B72ROUTE
4292          KM        Cross-section: golf course, assumed 0.5% side slopes
4293          KM        V-ditch / Manning's N Value: grass/golf course
4294          RS      34    FLOW
4295          RC   0.025   0.025   0.025    8168  0.0022    0.00
4296          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4297          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                          PAGE109

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

4298          KK     B72BASIN
4299          KM        PALM VALLEY
4300          BA   1.120
4301          LG    0.18    0.25    4.90    0.38      33
4302          UI       0     131     359     655     838    1161    1603    1191     933     682
4303          UI     443     229     171     112      41      40      40      41       0       0
4304          UI       0       0       0       0       0       0       0       0       0       0
4305          UI       0       0       0       0       0       0       0       0       0       0
4306          UI       0       0       0       0       0       0       0       0       0       0
              *

4307          KK  DB72REDIVERT
4308          KM        Retention volume estimated based on aerial
4309          DT    RB72    49.8     0.0
4310          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4311          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4312          KK   CPB72COMBINE
4313          HC       2   2.079
              *

4314          KK  B72B74ROUTE
4315          KM        Cross-section: estimated from aerial, assumed 4' depth, 4:1
4316          KM        sideslopes / Manning's N Value: concrete channel
4317          RS       1    FLOW
4318          RC   0.016   0.016   0.016    2872  0.0045    0.00
4319          RX  100.00  107.00  114.00  138.00  150.00  174.00  184.00  194.00
4320          RY  1000.2 1000.10 1000.00  996.00  996.10 1000.00 1000.10 1000.10
              *

4321          KK     B73BASIN
4322          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
4323          BA   0.304
4324          LG    0.10    0.25    4.70    0.45      54
4325          UI       0     134     424     760     565     297     105      37      23       0
4326          UI       0       0       0       0       0       0       0       0       0       0
4327          UI       0       0       0       0       0       0       0       0       0       0
4328          UI       0       0       0       0       0       0       0       0       0       0
4329          UI       0       0       0       0       0       0       0       0       0       0
              *

4330          KK  DB73REDIVERT
4331          KM        Retention volume estimated based on aerial
4332          DT    RB73    24.9     0.0
4333          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4334          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE110

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

4335          KK   SRB73STORAGE
4336          KM        ADOT Regional Basin (per URS 2001 study)
4337          KO
4338          RS       1    STOR
4339          SV            9.46   52.88  120.61  265.17  348.06  348.16  348.26
4340          SQ            7.00   55.00   55.00   55.00   55.00   55.00  329.00
4341          SE  975.70  978.00  980.00  982.00  986.00  988.00  988.80  990.00
4342          ST
              *

4343          KK  B73B74ROUTE
4344          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4345          KM        Manning's N Value: avg value for cultivated areas
4346          RS      15    FLOW
4347          RC   0.038   0.038   0.038    1446  0.0007    0.00
4348          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4349          RY  1000.0  999.50  998.50  998.00  998.30  998.50  999.50 1000.00
              *

4350          KK     B74BASIN
4351          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
4352          BA   0.106
4353          LG    0.10    0.25    4.80    0.44      68
4354          UI       0     104     334     268      86      20       0       0       0       0
4355          UI       0       0       0       0       0       0       0       0       0       0
4356          UI       0       0       0       0       0       0       0       0       0       0
4357          UI       0       0       0       0       0       0       0       0       0       0
4358          UI       0       0       0       0       0       0       0       0       0       0
              *

4359          KK  DB74REDIVERT
4360          KM        Retention volume estimated based on aerial
4361          DT    RB74     4.9     0.0
4362          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4363          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4364          KK   CPB74COMBINE
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4365        HC       3   2.489
            *

4366        KK   SRB74STORAGE
4367        KM        ADOT Regional Basin (per URS 2001 study)
4368        KO
4369        RS       1     STOR
4370        SV            11.35   32.69   57.00  108.98  126.82  136.43
4371        SQ             2.00   60.00  263.00  668.00  800.00  953.00
4372        SE   974.60  978.00  980.00  982.00  986.00  987.30  988.00
4373        ST
            *
1                                   HEC-1 INPUT                                                    PAGE111

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

4374        KK  B74B84ROUTE
4375        KM        Cross-section: Cross-section determined from aerial and 1990
4376        KM        topo / Manning's N Value: channel w/ concrete sides
4377        RS       1     FLOW
4378        RC   0.016   0.022   0.016    2292  0.0050    0.00
4379        RX  100.00  120.00  140.00  160.00  182.00  202.00  212.00  222.00
4380        RY  986.20  986.10  986.00  976.00  976.10  986.00  986.10  983.20
            *

4381        KK     B84BASIN
4382        KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
4383        BA   0.216
4384        LG    0.10    0.15    8.00    0.12      51
4385        UI       0      95     297     534     405     214      76      28      16       0
4386        UI       0       0       0       0       0       0       0       0       0       0
4387        UI       0       0       0       0       0       0       0       0       0       0
4388        UI       0       0       0       0       0       0       0       0       0       0
4389        UI       0       0       0       0       0       0       0       0       0       0
            *

4390        KK  DB84REDIVERT
4391        KM        Retention volume estimated based on aerial
4392        DT    RB84     2.0     0.0
4393        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4394        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4395        KK   CPB84COMBINE
4396        HC       4   7.238
            *

4397        KK   SRB84STORAGE
4398        KM        ADOT Regional Basin (per URS 2001 study)
4399        KM        Drains to River via underground storm drain system
4400        KO
4401        RS       1     STOR
4402        SV            25.10   71.68  127.08  189.52  324.54  402.14  402.24  402.34
4403        SQ             6.00  233.00  460.00  460.00  460.00  460.00  460.00  657.00
4404        SE   972.50  976.00  978.00  980.00  982.00  986.00  988.00  988.60  990.00
4405        ST
            *

4406        KK     B28BASIN
4407        KM        BASIN BOUNDARY FROM RANCHO SANTA FE
4408        BA   0.960
4409        LG    0.23    0.25    4.55    0.42      36
4410        UI       0     116     330     579     759    1086    1374    1003     771     567
4411        UI     318     197     130      74      36      35      36       0       0       0
4412        UI       0       0       0       0       0       0       0       0       0       0
4413        UI       0       0       0       0       0       0       0       0       0       0
4414        UI       0       0       0       0       0       0       0       0       0       0
            *
1                                   HEC-1 INPUT                                                    PAGE112

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

4415        KK  DB28REDIVERT
4416        KM        Rancho Santa Fe Ph.1 Infrastructure Drainage Design Report
4417        DT    RB28     0.4     0.0
4418        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4419        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4420        KK     B29BASIN
4421        KM        BASIN BOUNDARY FROM PALMILLA APTS, RANCHO SANTA FE CENTER
4422        KM        PALMILLA CENTER
4423        BA   0.177
4424        LG    0.12    0.23    4.80    0.40      72
4425        UI       0      57     184     313     381     231     114      51      20      11
4426        UI       0       0       0       0       0       0       0       0       0       0
4427        UI       0       0       0       0       0       0       0       0       0       0
4428        UI       0       0       0       0       0       0       0       0       0       0
4429        UI       0       0       0       0       0       0       0       0       0       0
            *

4430        KK  DB29REDIVERT
4431        KM        Drainage Report for Palmilla Center, Final Drainage
4432        KM        Report for Rancho Santa Fe Center, Final Drainage
4433        KM        Report for Palmilla Apts, Drainage Report - Walmart
4434        DT    RB29    15.9     0.0
4435        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4436        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4437        KK     B30BASIN
4438        KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
4439        BA   0.170
4440        LG    0.10    0.25    4.70    0.42      81
4441        UI       0      73     230     418     320     173      60      23      12       0
4442        UI       0       0       0       0       0       0       0       0       0       0
4443        UI       0       0       0       0       0       0       0       0       0       0
4444        UI       0       0       0       0       0       0       0       0       0       0
4445        UI       0       0       0       0       0       0       0       0       0       0
            *

4446        KK  DB30REDIVERT
4447        KM        Drainage Report for Avondale Home Depot, Master
4448        KM        Drainage Report for Coldwater Plaza, Remaining
4449        KM        retention volume estimated from aerial
4450        DT    RB30    12.8     0.0
4451        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4452        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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4453             KK   SRB30STORAGE
4454             KM        Storage behind Agua Fria River levee (WLB)
4455             KO
4456             RS       1    STOR
4457             SV            1.16    7.44   17.82   22.15   60.86
4458             SQ           16.00   38.00   49.00  117.00 3687.00
1                                          HEC-1 INPUT                                                    PAGE113

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

4459             SE  972.00  974.00  976.00  977.60  978.00  980.00
4460             ST
                 *

4461             KK     B31BASIN
4462             KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
4463             BA   0.681
4464             LG    0.17    0.25    4.60    0.46      43
4465             UI       0     190     644    1012    1477     957     558     227     112      41
4466             UI      40       0       0       0       0       0       0       0       0       0
4467             UI       0       0       0       0       0       0       0       0       0       0
4468             UI       0       0       0       0       0       0       0       0       0       0
4469             UI       0       0       0       0       0       0       0       0       0       0
                 *

4470             KK  DB31REDIVERT
4471             KM        Preliminary Drainage Report for Rio Estrella Plaza
4472             KM        Drainage Report for Rio Estrella Commerce Park Drainage
4473             KM        System, Final Drainage Report for Parcel XIV at Arizona Traditions,
4474             KM        Remaining retention volume estimated from aerial
4475             DT    RB31    27.0     0.0
4476             DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4477             DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

4478             KK   SRB31STORAGE
4479             KM        Storage behind Agua Fria River levee (WLB)
4480             KO
4481             RS       1    STOR
4482             SV            4.15   34.22   71.09  141.43  276.96  481.06  516.31  604.41  744.46
4483             SQ           16.00   50.00   71.00   87.00  100.00  112.00  114.00 1335.0010496.00
4484             SE  956.00  958.00  960.00  962.00  964.00  966.00  968.00  968.30  969.00  970.00
4485             ST
                 *

4486             KK   DUMMYCOMBINE
4487             HC       2
                 *

4488             KK   DUMMYCOMBINE
4489             HC       5
                 *

4490             KK     B32BASIN
4491             KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR TRES
4492             KM        RIOS LANDING PARCELS 4 AND 5 DATED 2/13/03 BY CMX AND FINAL DRAINAGE
4493             KM        REPORT FOR THE VILLAGE AT TRES RIOS LANDING DATED 6/14/05 BY CMX
4494             BA   0.819
4495             LG    0.22    0.25    3.88    0.42      37
4496             UI       0     104     329     552     723    1119    1128     823     610     407
4497             UI     198     143      87      32      32      32       0       0       0       0
4498             UI       0       0       0       0       0       0       0       0       0       0
4499             UI       0       0       0       0       0       0       0       0       0       0
4500             UI       0       0       0       0       0       0       0       0       0       0
                 *
1                                          HEC-1 INPUT                                                    PAGE114

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

4501             KK  DB32REDIVERT
4502             KM        Final Drainage Report for Tres Rios Landing Parcels 4 & 5, Final
4503             KM        Drainage Report for The Village at Tres Rios Landing, Drainage
4504             KM        Report for Whyman Haciendas, Drainage Report for Litchfield
4505             KM        Mountain View Homes, Remaining retention volume estimated from aerial
4506             DT    RB32    49.1     0.0
4507             DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4508             DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

4509             KK   SRB32STORAGE
4510             KM        Storage behind Lwr Buckeye Rd, est from topo
4511             KO
4512             RS       1    STOR
4513             SV            7.79   53.57  155.29  276.97
4514             SQ                         2206.00 6240.00
4515             SE  942.00  944.00  946.00  948.00  950.00
4516             ST
                 *

4517             KK  B32B33ROUTE
4518             KM        Cross-section: Cross-section determined from 1990 topo
4519             KM        Manning's N Value: clean straight earth
4520             RS       1    FLOW
4521             RC   0.022   0.022   0.022    3134  0.0045    0.00
4522             RX  100.00  112.00  125.00  132.00  185.00  190.00  215.00  240.00
4523             RY  948.00  944.00  940.00  938.00  938.10  940.00  942.00  944.00
                 *

4524             KK     B33BASIN
4525             KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4526             BA   0.285
4527             LG    0.15    0.25    4.30    0.54      56
4528             UI       0     379    1111     565     118       0       0       0       0       0
4529             UI       0       0       0       0       0       0       0       0       0       0
4530             UI       0       0       0       0       0       0       0       0       0       0
4531             UI       0       0       0       0       0       0       0       0       0       0
4532             UI       0       0       0       0       0       0       0       0       0       0
                 *

4533             KK  DB33REDIVERT
4534             KM        Master Drainage Report for Lower Buckeye Park
4535             KM        Remaining retention volume estimated from aerial
4536             DT    RB33    32.2     0.0
4537             DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4538             DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *
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4539          KK   CPB33COMBINE
4540          HC       2   1.104
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1                                          HEC-1 INPUT                                                    PAGE115

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


4541          KK     B34BASIN
4542          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4543          BA   0.125
4544          LG    0.17    0.25    4.25    0.55      43
4545          UI       0     218     545     173      27       0       0       0       0       0
4546          UI       0       0       0       0       0       0       0       0       0       0
4547          UI       0       0       0       0       0       0       0       0       0       0
4548          UI       0       0       0       0       0       0       0       0       0       0
4549          UI       0       0       0       0       0       0       0       0       0       0
              *

4550          KK  DB34REDIVERT
4551          KM        Additional Retention based on 100yr 2hr retention.
4552          KM        C value is based on future land use, P=2.7, A=acres
4553          DT    RB34     2.7     0.0
4554          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4555          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4556          KK     B38BASIN
4557          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4558          BA   0.343
4559          LG    0.12    0.25    4.20    0.59      54
4560          UI       0     281     888     956     379     108      33       0       0       0
4561          UI       0       0       0       0       0       0       0       0       0       0
4562          UI       0       0       0       0       0       0       0       0       0       0
4563          UI       0       0       0       0       0       0       0       0       0       0
4564          UI       0       0       0       0       0       0       0       0       0       0
              *

4565          KK  DB38REDIVERT
4566          KM        Retention volume estimated based on aerial
4567          DT    RB38    39.8     0.0
4568          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4569          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4570          KK  B38B39ROUTE
4571          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4572          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4573          RS      27    FLOW
4574          RC   0.035   0.035   0.035    4543  0.0018    0.00
4575          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
4576          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

4577          KK     B37BASIN
4578          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4579          BA   0.466
4580          LG    0.10    0.25    3.92    0.41      54
4581          UI       0     217     670    1206     852     418     155      48      35       0
4582          UI       0       0       0       0       0       0       0       0       0       0
4583          UI       0       0       0       0       0       0       0       0       0       0
4584          UI       0       0       0       0       0       0       0       0       0       0
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4585          UI       0       0       0       0       0       0       0       0       0       0
              *

4586          KK  DB37REDIVERT
4587          KM        Additional Retention based on 100yr 6hr retention.
4588          KM        C value is based on future land use, P=3.2, A=acres
4589          DT    RB37    59.4     0.0
4590          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4591          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4592          KK  B37B39ROUTE
4593          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4594          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4595          RS       1    FLOW
4596          RC   0.035   0.035   0.035    5801  0.0031    0.00
4597          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
4598          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

4599          KK     B39BASIN
4600          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
4601          KM        FLOW ENTERS BUCKEYE CANAL
4602          BA   0.775
4603          LG    0.11    0.25    4.70    0.44      46
4604          UI       0     222     749    1190    1680    1080     606     250     120      46
4605          UI      46       0       0       0       0       0       0       0       0       0
4606          UI       0       0       0       0       0       0       0       0       0       0
4607          UI       0       0       0       0       0       0       0       0       0       0
4608          UI       0       0       0       0       0       0       0       0       0       0
              *

4609          KK  DB39REDIVERT
4610          KM        Additional Retention based on 100yr 6hr retention.
4611          KM        C value is based on future land use, P=3.2, A=acres
4612          DT    RB39    82.2     0.0
4613          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4614          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4615          KK   CPB39COMBINE
4616          HC       3   1.584
              *

4617          KK   SRB39STORAGE
4618          KM        Storage behind canal (WLB)
4619          KO
4620          RS       1    STOR
4621          SV            1.84     7.82   26.86  173.63
4622          SQ                           247.00 6031.00
4623          SE  914.00  916.00  916.90  918.00  920.00
4624          ST
              *
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LINE          ID.......1.....2.......3.......4.......5.......6.......7.......8.......9......10

4625          KK     B35BASIN
4626          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
4627          KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
4628          BA   0.144
4629          LG    0.03    0.09    3.25    0.65      19
4630          UI       0      89     317     336     195      94      43      20       6       5
4631          UI       5       0       0       0       0       0       0       0       0       0
4632          UI       0       0       0       0       0       0       0       0       0       0
4633          UI       0       0       0       0       0       0       0       0       0       0
4634          UI       0       0       0       0       0       0       0       0       0       0
              *

4635          KK  DB35REDIVERT
4636          KM        Additional Retention based on 100yr 6hr retention.
4637          KM        C value is based on future land use, P=3.2, A=acres
4638          DT    RB35     0.3     0.0
4639          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4640          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4641          KK     B36BASIN
4642          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
4643          KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
4644          BA   0.056
4645          LG    0.01    0.02    4.55    0.30       3
4646          UI       0     178     204      40       7       5       0       0       0       0
4647          UI       0       0       0       0       0       0       0       0       0       0
4648          UI       0       0       0       0       0       0       0       0       0       0
4649          UI       0       0       0       0       0       0       0       0       0       0
4650          UI       0       0       0       0       0       0       0       0       0       0
              *

4651          KK  DB36REDIVERT
4652          KM        Additional Retention based on 100yr 6hr retention.
4653          KM        C value is based on future land use, P=3.2, A=acres
4654          DT    RB36     0.4     0.0
4655          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4656          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4657          KK   DUMMYCOMBINE
4658          HC       4
              *

4659          KK   DUMMYCOMBINE
4660          HC       3
              *

4661          KK     B40BASIN
4662          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
4663          KM        PHOTOGRAPHY OF AG LAND, 1990 TOPO, SWAN HILL NURSERIES AND
4664          KM        ORANGEWOOD NURSERIES
4665          BA   0.514
4666          LG    0.11    0.25    4.50    0.50      69
1                                         HEC-1 INPUT                                          PAGE118

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

4667          UI       0     164     544     932    1097     668     321     144      54      32
4668          UI       0       0       0       0       0       0       0       0       0       0
4669          UI       0       0       0       0       0       0       0       0       0       0
4670          UI       0       0       0       0       0       0       0       0       0       0
4671          UI       0       0       0       0       0       0       0       0       0       0
              *

4672          KK  DB40REDIVERT
4673          KM        Additional Retention based on 100yr 2hr retention.
4674          KM        C value is based on future land use, P=2.7, A=acres
4675          DT    RB40    37.9     0.0
4676          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4677          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4678          KK   DD681RETRIEVE
4679          DR  DD681S
              *

4680          KK  D68B40ROUTE
4681          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
4682          KM        aerial & topo / Manning's N Value: clean straight earth; street LOB
4683          RS       4    FLOW
4684          RC   0.016   0.022   0.022    5311  0.0047    0.00
4685          RX  100.00  112.00  124.00  132.00  135.00  143.00  155.00  167.00
4686          RY  1110.5 1110.30 1110.00 1108.00 1108.10 1110.00 1110.30 1110.50
              *

4687          KK   CPB40COMBINE
4688          HC       2   0.766
              *

4689          KK   DB401DIVERT
4690          KM        Glendale at Sarival split flow
4691          DT  DB401S     0.0     0.0
4692          DI     0.0    68.5   415.8  1670.6  4103.5     0.0     0.0     0.0     0.0     0.0
4693          DQ     0.0    37.6   246.0  1114.3  2520.9     0.0     0.0     0.0     0.0     0.0
              *

4694          KK   DB402DIVERT
4695          KM        Glendale at Sarival split flow
4696          DT  DB402S     0.0     0.0
4697          DI     0.0    30.9   169.8   556.4  1582.5     0.0     0.0     0.0     0.0     0.0
4698          DQ     0.0    14.8    64.4   133.4   217.3     0.0     0.0     0.0     0.0     0.0
              *

4699          KK  B40B41ROUTE
4700          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
4701          KM        on aerial & topo / Manning's N Value: clean straight earth
4702          RS       4    FLOW
4703          RC   0.022   0.022   0.013    5216  0.0033    0.00
4704          RX  100.00  100.50  228.00  234.00  238.00  244.00  252.00  260.00
4705          RY  1088.6 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1088.60
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
KK     B41BASIN
KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
KM        OF MARICOPA COUNTY HOMES AND 1990 TOPO
BA   0.952
LG    0.22    0.25    4.65    0.38      35
UI       0     102     240     466     601     771    1146    1120     862     656
UI     513     322     177     142     103      34      31      31      31       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DB41REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RB41    41.8     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   DD682RETRIEVE
DR  DD682S
*

KK  D68B41ROUTE
KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
KM        aerial & topo / Manning's N Value: earth with sparse trees and shrubs
RS      25    FLOW
RC   0.032   0.032   0.032   10073  0.0042    0.00
RX  100.00  124.00  130.00  136.00  141.00  147.00  153.00  162.00
RY  1120.1 1120.00 1118.50 1117.00 1117.10 1118.50 1120.00 1120.10
*

KK   DD691RETRIEVE
DR  DD691S
*

KK  D69B41ROUTE
KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
KM        on aerial & topo / Manning's N Value: clean straight earth
RS      21    FLOW
RC   0.022   0.022   0.022    5281  0.0038    0.00
RX  100.00  120.00  146.00  158.00  170.00  182.00  210.00  244.00
RY  1086.2 1086.10 1086.00 1083.00 1082.90 1086.00 1086.10 1086.20
*

KK   CPB41COMBINE
HC       4    2.18
*
```

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

KK  DB41SEDIVERT
KM        Reems at Glendale split flow
DT   DB41S     0.0     0.0
DI     0.0   210.0  1330.5  3445.6  6340.8     0.0     0.0     0.0     0.0     0.0
DQ     0.0   201.5  1259.5  3072.1  5469.4     0.0     0.0     0.0     0.0     0.0
*

KK  B41B43ROUTE
KM        Cross-section: Cross section estimated from aerial and topo
KM        Manning's N Value: clean straight earth
RS       3    FLOW
RC   0.022   0.022   0.022    1849  0.0022    0.00
RX  100.00  104.00  108.00  114.00  116.00  122.00  125.00  128.00
RY  1082.0 1081.80 1081.50 1080.00 1080.10 1081.50 1081.80 1082.00
*

KK     B43BASIN
KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
BA   0.541
LG    0.11    0.25    4.70    0.44      76
UI       0      62     166     306     394     534     759     586     456     340
UI     232     118      89      63      20      19      19      19       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DB43REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RB43    56.4     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   DD692RETRIEVE
DR  DD692S
*

KK  D69B43ROUTE
KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
RS      33    FLOW
RC   0.035   0.035   0.035    9199  0.0027    0.00
RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
*

KK   CPB43COMBINE
HC       3   2.721
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  B43B45ROUTE
KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
KM        aerial & topo / Manning's N Value: clean straight earth
RS       7    FLOW
RC   0.022   0.022   0.022    4681  0.0004    0.00
RX  100.00  112.00  124.00  132.00  138.00  146.00  166.00  186.00
RY  1080.5 1080.30 1080.00 1076.00 1076.10 1080.00 1080.30 1080.50
*
```

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4787          KK     B44BASIN
4788          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
4789          KM        PHOTOGRAPHY OF AG LAND AND1990 TOPO
4790          BA   0.525
4791          LG    0.13     0.25     4.25     0.57       69
4792          UI       0      173      559      960     1124      680      317      144       53       33
4793          UI       0        0        0        0        0        0        0        0        0        0
4794          UI       0        0        0        0        0        0        0        0        0        0
4795          UI       0        0        0        0        0        0        0        0        0        0
4796          UI       0        0        0        0        0        0        0        0        0        0
              *

4797          KK  DB44REDIVERT
4798          KM        Additional Retention based on 100yr 2hr retention.
4799          KM        C value is based on future land use, P=2.7, A=acres
4800          DT    RB44     49.4      0.0
4801          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4802          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4803          KK   DB401RETRIEVE
4804          DR  DB401S
              *

4805          KK  B40B44ROUTE
4806          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
4807          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
4808          KM        street LOB
4809          RS      12    FLOW
4810          RC   0.013    0.032    0.038     5333   0.0037     0.00
4811          RX  100.00   112.00   128.00   136.00   138.00   146.00   449.00   450.00
4812          RY  1084.8  1084.50  1084.00  1082.00  1082.10  1084.00  1084.40  1084.80
              *

4813          KK   CPB44COMBINE
4814          HC       2   1.291
              *

4815          KK   DB441DIVERT
4816          KM        Bethany Home at Sarival split flow
4817          DT  DB441S      0.0      0.0
4818          DI     0.0   1083.7   2846.1   5566.3   9305.7      0.0      0.0      0.0      0.0      0.0
4819          DQ     0.0    133.1    579.6   1378.1   2728.9      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4820          KK   DB442DIVERT
4821          KM        Bethany Home at Sarival split flow
4822          DT  DB442S      0.0      0.0
4823          DI     0.0    950.6   2266.5   4188.3   6576.8      0.0      0.0      0.0      0.0      0.0
4824          DQ     0.0     83.1    145.7    219.1    301.9      0.0      0.0      0.0      0.0      0.0
              *

4825          KK  B44B45ROUTE
4826          KM        Cross-section: Estimated 4' deep, width and side slopes based on
4827          KM        aerial & topo / Manning's N Value: clean straight earth, street ROB
4828          RS       2    FLOW
4829          RC   0.022    0.022    0.016     2127   0.0019     0.00
4830          RX  100.00   120.00   140.00   152.00   192.00   204.00   224.00   236.00
4831          RY  1078.5  1078.30  1078.00  1074.00  1074.10  1078.00  1078.30  1078.50
              *

4832          KK     B45BASIN
4833          KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
4834          BA   0.805
4835          LG    0.15     0.25     4.70     0.41       62
4836          UI       0      118      457      682      987     1409      970      689      433      203
4837          UI     132       57       36       36        0        0        0        0        0        0
4838          UI       0        0        0        0        0        0        0        0        0        0
4839          UI       0        0        0        0        0        0        0        0        0        0
4840          UI       0        0        0        0        0        0        0        0        0        0
              *

4841          KK  DB45REDIVERT
4842          KM        Additional Retention based on 100yr 2hr retention.
4843          KM        C value is based on future land use, P=2.7, A=acres
4844          DT    RB45     63.5      0.0
4845          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4846          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4847          KK   DB402RETRIEVE
4848          DR  DB402S
              *

4849          KK  B40B45ROUTE
4850          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4851          KM        aerial & topo / Manning's N Value: clean straight earth
4852          RS       6    FLOW
4853          RC   0.022    0.022    0.022     6771   0.0037     0.00
4854          RX  100.00   120.00   140.00   152.00   153.00   165.00   175.00   185.00
4855          RY  1090.2  1090.10  1090.00  1087.00  1087.10  1090.00  1090.10  1090.20
              *

4856          KK  DB41SERETRIEVE
4857          DR   DB41S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4858          KK  B41B45ROUTE
4859          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4860          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4861          RS       8    FLOW
4862          RC   0.035    0.035    0.035     6479   0.0009     0.00
4863          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
4864          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
              *

4865          KK   CPB45COMBINE
4866          HC       5   4.051
              *

4867          KK  B45B47ROUTE
4868          KM        Cross-section:
```

```
4869          KM        Manning's N Value: avg value for cultivated areas
4870          RS       8    FLOW
4871          RC   0.038   0.038   0.038    5550  0.0043    0.00
4872          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4873          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

4874          KK     L01BASIN
4875          KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
4876          BA   0.162
4877          LG    0.26    0.26    5.20    0.29      33
4878          UI       0      64     203     370     316     184      68      28      12       0
4879          UI       0       0       0       0       0       0       0       0       0       0
4880          UI       0       0       0       0       0       0       0       0       0       0
4881          UI       0       0       0       0       0       0       0       0       0       0
4882          UI       0       0       0       0       0       0       0       0       0       0
              *

4883          KK  DL01REDIVERT
4884          KM        Master Drainage Report for Del Webb's Grand Avenue Property
4885          DT    RL01     9.9     0.0
4886          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4887          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4888          KK  L01L03ROUTE
4889          KM        Cross-section: From Arizona Traditions Report
4890          KM        Manning's N Value: Channel along Arizona Traditons
4891          KM        Manning's for earth with grass and forbs
4892          RS       5    FLOW
4893          RC   0.025   0.025   0.025    5547  0.0032    0.00
4894          RX  100.00  114.00  116.00  118.00  120.00  122.00  124.00  138.00
4895          RY  1000.0  995.40  995.30  995.20  995.10  995.20  995.30 1000.00
              *
1                                        HEC-1 INPUT                                                    PAGE124

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

4896          KK     L03BASIN
4897          KM        BASIN BOUNDARY FROM ARIZONA TRADITIONS NORTH AND SOUTH
4898          BA   0.786
4899          LG    0.20    0.25    5.80    0.25      27
4900          UI       0     102     333     547     722    1142    1060     769     572     362
4901          UI     174     127      70      31      32      31       0       0       0       0
4902          UI       0       0       0       0       0       0       0       0       0       0
4903          UI       0       0       0       0       0       0       0       0       0       0
4904          UI       0       0       0       0       0       0       0       0       0       0
              *

4905          KK  DL03REDIVERT
4906          KM        Master Drainage Study for Arizona Traditions
4907          DT    RL03    68.1     0.0
4908          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4909          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4910          KK     L20BASIN
4911          KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST
4912          KM        BEARDSLEY CSR ON THE EAST AND BELL POINT I
4913          BA   0.347
4914          LG    0.27    0.28    5.60    0.24      20
4915          UI       0      42     117     211     271     391     493     364     281     204
4916          UI     118      72      48      27      13      13      13       0       0       0
4917          UI       0       0       0       0       0       0       0       0       0       0
4918          UI       0       0       0       0       0       0       0       0       0       0
4919          UI       0       0       0       0       0       0       0       0       0       0
              *

4920          KK  DL20REDIVERT
4921          KM        Bell Pointe I and II, Arizona Traditions Parcel XIV
4922          DT    RL20    21.3     0.0
4923          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4924          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4925          KK  L20L03ROUTE
4926          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
4927          KM        width based on aerial
4928          KM        Manning's N Value: earth w/ sparse trees and shrubs
4929          RS       6    FLOW
4930          RC   0.032   0.032   0.032    5440  0.0055    0.00
4931          RX  100.00  106.00  112.00  124.00  136.00  148.00  168.00  188.00
4932          RY  1310.5 1310.30 1310.00 1307.00 1307.10 1310.00 1310.30 1310.50
              *

4933          KK   CPL03COMBINE
4934          HC       3   1.295
              *
1                                        HEC-1 INPUT                                                    PAGE125

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

4935          KK  DL03SEDIVERT
4936          KM        Diversion at Bell Rd near Citrus
4937          KM        Culverts under Bell Rd to south
4938          DT   DL03S     0.0     0.0
4939          DI     0.0    37.0   237.0   537.0  1037.0     0.0     0.0     0.0     0.0     0.0
4940          DQ     0.0    37.0    37.0   337.0   837.0     0.0     0.0     0.0     0.0     0.0
              *

4941          KK  L03L04ROUTE
4942          KM        Cross-section: Cross section estimated from aerial for 1/2 street sectio
4943          KM        Manning's N Value: street, earth with sparse trees and shrubs
4944          RS       8    FLOW
4945          RC   0.032   0.013   0.013    3413  0.0046    0.00
4946          RX  100.00  103.00  123.00  123.10  162.00  162.10  165.00  169.00
4947          RY  1000.2 1000.10  999.50  999.00  999.80 1000.30 1000.40 1000.50
              *

4948          KK     L04BASIN
4949          KM        BASIN BOUNDARY FROM HAPPY TRAILS DEVLP
4950          BA   0.631
4951          LG    0.18    0.25    5.00    0.38      22
4952          UI       0      74     199     362     466     640     898     677     528     391
4953          UI     261     128     100      68      22      23      22      23       0       0
4954          UI       0       0       0       0       0       0       0       0       0       0
4955          UI       0       0       0       0       0       0       0       0       0       0
4956          UI       0       0       0       0       0       0       0       0       0       0
```

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                *
4957            KK  DL04REDIVERT
4958            KM        Retention volume estimated based on aerial, Happy Trails
4959            DT    RL04     44.0      0.0
4960            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4961            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

4962            KK   CPL04COMBINE
4963            HC       2   1.926
                *

4964            KK  DL04SEDIVERT
4965            KM        Intersection diversion Bell Rd at Cotton Ln
4966            DT   DL04S      0.0      0.0
4967            DI     0.0      0.0     56.3    171.0   1026.0   1998.0   4546.0      0.0      0.0      0.0
4968            DQ     0.0      0.0      0.0     36.0    526.0   1058.0   2453.0      0.0      0.0      0.0
                *

4969            KK  L04L05ROUTE
4970            KM        Cross-section: Cross-section determined from aerial
4971            KM        Manning's N Value: retention basins, earth w/ grass
4972            RS       1     FLOW
4973            RC   0.025    0.025    0.025     2571   0.0024     0.00
4974            RX  100.00   109.00   109.10   121.50   209.50   209.60   211.00   215.00
4975            RY  1283.3 1282.80 1282.30 1282.50 1282.60 1283.00 1283.10 1283.30
                *
1                                          HEC-1 INPUT                                                PAGE126

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


4976            KK     L02BASIN
4977            KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
4978            BA   1.884
4979            LG    0.22     0.26     5.20     0.31       31
4980            UI       0      164      249      626      824     1004     1218     1647     2056     1566
4981            UI    1303     1062      855      641      370      278      220      166       84       50
4982            UI      51       50       50       51        0        0        0        0        0        0
4983            UI       0        0        0        0        0        0        0        0        0        0
4984            UI       0        0        0        0        0        0        0        0        0        0
                *

4985            KK  DL02REDIVERT
4986            KM        Master Drainage Report for Del Webb's Grand Avenue Property
4987            DT    RL02    117.2      0.0
4988            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4989            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

4990            KK  L02L05ROUTE
4991            KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
4992            KM        model received on May 6, 2009 from PB.
4993            RS       1     FLOW
4994            RC   0.035    0.015    0.035     5263   0.0045     0.00
4995            RX    0.00     3.00     5.00    17.00    25.00    37.00    49.00    52.00
4996            RY  1290.0 1290.00 1289.00 1283.00 1283.00 1289.00 1290.00 1290.00
                *

4997            KK     L05BASIN
4998            KM        BASIN BOUNDARY FROM COMM DEVLP AND BELL WEST RANCH
4999            BA   0.486
5000            LG    0.23     0.25     5.70     0.24       43
5001            UI       0       68      253      389      545      828      602      436      296      139
5002            UI      91       50       21       21       22        0        0        0        0        0
5003            UI       0        0        0        0        0        0        0        0        0        0
5004            UI       0        0        0        0        0        0        0        0        0        0
5005            UI       0        0        0        0        0        0        0        0        0        0
                *

5006            KK  DL05REDIVERT
5007            KM        Final Drainage Report for Cotton Lane Professional Park, Drainage Report
5008            KM        Bell West Ranch Shops, Final Drainage Report - Bell West Ranch Parcel 4
5009            KM        Master Drainage Report - Bell West Ranch
5010            DT    RL05     33.2      0.0
5011            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5012            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

5013            KK   CPL05COMBINE
5014            HC       3   4.296
                *
1                                          HEC-1 INPUT                                                PAGE127

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


5015            KK  L05L09ROUTE
5016            KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5017            KM        model received on May 6, 2009 from PB.
5018            RS       2     FLOW
5019            RC   0.035    0.015    0.035     5376   0.0036     0.00
5020            RX    0.00     3.00     5.00    16.00    26.00    37.00    57.00    60.00
5021            RY  1269.5 1268.50 1268.50 1263.00 1263.00 1268.50 1268.50 1269.50
                *

5022            KK     L09BASIN
5023            KM        BASIN BOUNDARY FROM SURPRISE FARMS
5024            BA   0.489
5025            LG    0.22     0.25     5.70     0.25       44
5026            UI       0       69      242      382      527      816      615      449      313      147
5027            UI      97       59       21       21       21        0        0        0        0        0
5028            UI       0        0        0        0        0        0        0        0        0        0
5029            UI       0        0        0        0        0        0        0        0        0        0
5030            UI       0        0        0        0        0        0        0        0        0        0
                *

5031            KK  DL09REDIVERT
5032            KM        Final Drainage Report for Parcels 2-7 of Surprise Farms, Parcel 8 (Basin
5033            KM        Final Drainage Report for Safeway Store #1997, Retention Calculations fo
5034            KM        New Dysart Elementary School No. 9 at Site J (excess of 3.30 ac-ft)
5035            DT    RL09     51.4      0.0
5036            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5037            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

5038            KK   CPL09COMBINE
5039            HC       2   4.785
                *
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5040          KK  L0913BROUTE
5041          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5042          KM        model received on May 6, 2009 from PB,
5043          KM        Greenway to Waddell Basin Divert-RLPUS
5044          RS       1    FLOW
5045          RC   0.035   0.015   0.035    3314  0.0037    0.00
5046          RX    0.00    3.00    5.00   15.00   29.00   39.00   59.00   62.00
5047          RY  1248.0 1247.00 1247.00 1242.00 1242.00 1247.00 1247.00 1248.00
              *

5048          KK  DL13BNDIVERT
5049          KM        Final Drainage Report for Parcels 2-7 of Surprise Farms, Parcel 8 (Basin
5050          DT  DL13BR      0.0     0.0
5051          DI     0.0    12.0   300.0   400.0   500.0   600.0   700.0   783.0   900.0     0.0
5052          DQ     0.0     0.0   119.8   194.4   278.8   367.9   466.2   549.0   663.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE128

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

5053          KK  DL13BNRETRIEVE
5054          DR  DL13BR
              *

5055          KK  SRL13BSTORAGE
5056          KM        STORAGE THROUGH WADDELL BASIN-SRLP2A,
5057          KM        EX_SPLIT.DAT MODEL FROM PB, MAY 6, 2009
5058          KO
5059          RS       1    STOR
5060          SV            0.48    1.95    4.98   22.89   33.96   64.20   71.91   79.96   88.17
5061          SQ            6.20   18.40   19.40   22.90   25.22   28.20  245.30  767.10 1687.80
5062          SE  1223.0 1224.00 1225.00 1226.00 1230.00 1233.00 1237.00 1238.00 1239.00 1240.00
5063          ST
              *

5064          KK  CPL13BCOMBINE
5065          HC       2   4.785
              *

5066          KK  L13B13ROUTE
5067          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5068          KM        model received on May 6, 2009 from PB, Waddell Basin
5069          KM        overflow combine to Waddell Road-RLPDS
5070          RS       1    FLOW
5071          RC   0.035   0.015   0.035    1594  0.0036    0.00
5072          RX    0.00    3.00    5.00   15.00   31.00   41.00   61.00   64.00
5073          RY  1134.0 1133.00 1132.90 1128.00 1127.90 1132.90 1133.00 1134.00
              *

5074          KK     L13BASIN
5075          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
5076          KM        EASTERN BOUNDARY LOOP 303
5077          BA   0.483
5078          LG    0.10    0.25    4.90    0.41      80
5079          UI       0     169     542     950    1004     609     260     125      36      31
5080          UI       0       0       0       0       0       0       0       0       0       0
5081          UI       0       0       0       0       0       0       0       0       0       0
5082          UI       0       0       0       0       0       0       0       0       0       0
5083          UI       0       0       0       0       0       0       0       0       0       0
              *

5084          KK  DL13REDIVERT
5085          KM        Additional Retention based on 100yr 2hr retention.
5086          KM        C value is based on future land use, P=2.7, A=acres
5087          DT    RL13    51.0     0.0
5088          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5089          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE129

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

5090          KK     L06BASIN
5091          KM        BASIN BOUNDARY FROM SURPRISE FARMS AND SF SCHOOL DISTRICT
5092          BA   0.696
5093          LG    0.25    0.25    5.30    0.29      34
5094          UI       0     103     394     599     875    1203     839     597     364     176
5095          UI     111      46      32      31       0       0       0       0       0       0
5096          UI       0       0       0       0       0       0       0       0       0       0
5097          UI       0       0       0       0       0       0       0       0       0       0
5098          UI       0       0       0       0       0       0       0       0       0       0
              *

5099          KK  DL06REDIVERT
5100          KM        Final Drainage Report for Surprise Farms Phase 5 (Tracts A1, B, C1, G, K
5101          KM        O, P, Q S1N, S1S, Z), Drainage Report for Surprise Farms
5102          KM        Phase 4 Parcel 1 (TR-1D, 1F, 3A1,  & 3A2 (3As in Parcel 4B)),
5103          KM        Drainage Report for City of Surprise Surprise Farms Park (Basins 1, 2, 5
5104          KM        Drainage Report for Surprise Farms Phase 4B Infrastructure (Retention
5105          KM        in Surrounding Basins except for missing reports: TR-2B1, 2B2, 3N,
5106          KM        3H, 3K, 4J), Drainage Report for Surprise Farms Phase 4 Parcel 5
5107          KM        (TR-5A1, 5A2, 5B West, 5B East, 5D), Drainage Report for
5108          KM        Surprise Farms Phase 4 Parcel 6 (TR 6J), Drainage Report for
5109          KM        Surprise Farms Phase III Parcel 1 (Retention Basin 1,2,3,4)
5110          KM        Drainage Report for Surprise Farms Phase III Parcel 2
5111          KM        (Basins 1,2,3,4,5), Drainage Report for Surprise Farms Phase III Parcel
5112          KM        for Surprise Farms Phase III Parcel  4 (Basin 1,3,6), Drainage Report
5113          KM        for Surprise Farms Phase III Parcel 5 (Basin 1), Drainage
5114          KM        Report for Surprise Farms Phase III Parcel 3
5115          KM        (Basin 1, 2, 3, 4), Drainage Report for New
5116          KM        Dysart Preschool (One basin on N Corner), Drainage Report for
5117          KM        Dysart Elementary School No 15 and Preschool
5118          DT    RL06    81.3     0.0
5119          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5120          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5121          KK  DL06SEDIVERT
5122          KM        179th at Greeway split flow
5123          DT   DL06S     0.0     0.0
5124          DI     0.0   125.4   973.2  2548.4  5028.3     0.0     0.0     0.0     0.0     0.0
5125          DQ     0.0   125.4   973.2  2275.2  4106.2     0.0     0.0     0.0     0.0     0.0
              *

5126          KK  L06L07ROUTE
5127          KM        Cross-section: Cross-section determined from A-team survey
5128          KM        / Manning's N Value: street and earth channel with sparse trees and shru
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5129          RS       1    FLOW
5130          RC   0.032   0.013   0.013    2771  0.0031    0.00
5131          RX  100.00  100.10  100.20  122.00  126.00  133.00  146.00  159.00
5132          RY  1286.2 1286.10 1286.00 1282.00 1282.00 1283.00 1283.00 1283.80
              *
1                                        HEC-1 INPUT                                                    PAGE130

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

5133          KK     L07BASIN
5134          KM        BASIN BOUNDARY FROM SURPRISE FARMS
5135          BA   0.632
5136          LG    0.25    0.25    5.30    0.29      37
5137          UI       0      88     314     493     682    1054     795     581     404     190
5138          UI     126      75      27      27      28       0       0       0       0       0
5139          UI       0       0       0       0       0       0       0       0       0       0
5140          UI       0       0       0       0       0       0       0       0       0       0
5141          UI       0       0       0       0       0       0       0       0       0       0
              *

5142          KK  DL07REDIVERT
5143          KM        Drainage Report for Surprise Farms Phase II Infrastructure, Drainage
5144          KM        Report for Surprise Farms Community Park (Community Parks Basin A, B)
5145          KM        Pavement Drainage Report for Surprise Farms School Site
5146          KM        (High School Basin A, B1, C1, D, E, F1), Drainage Report for
5147          KM        Surprise Farms Phase 2 Parcel 6, Drainage Report for Surprise
5148          KM        Farms Phase III Parcel 6 (Basins 1,2,3,4,5), Drainage Report for Surpris
5149          KM        Farms Phase 2 Parcel 1, Drainage Report for Surprise Farms
5150          KM        Phase 2 Parcel 5, Drainage Report for Surprise Farms Phase 2 Parcel 2,
5151          KM        Drainage Report for Surprise Farms Phase 2 Parcel 4,
5152          KM        Drainage Report for Surprise Farms
5153          KM        Phase 2 Parcel 3, Drainage Report for City of Surprise Surprise Farms Pa
5154          KM        Drainage Report for Surprise Farms Phase 2 Parcel 1
5155          DT    RL07     66.6     0.0
5156          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5157          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5158          KK  DL03SERETRIEVE
5159          DR   DL03S
              *

5160          KK  L0307AROUTE
5161          KM        Cross-section: Channel is 16' wide and 2' deep with 4: side slopes per
5162          KM        Surprise Farms Phase II Infrastructure Report (Report 287)
5163          KM        Manning's N Value: riprap and pavement
5164          RS       3    FLOW
5165          RC   0.013   0.032   0.032    3088  0.0052    0.00
5166          RX  100.00  119.00  119.50  155.00  163.00  171.00  172.00  173.00
5167          RY  1000.0  999.60 1000.10  999.50  997.50  999.50  999.70 1000.00
              *

5168          KK  L0307BROUTE
5169          KM        Cross-section: Cross section determined from aerial, 1/2 street section
5170          KM        Manning's N Value: pavement, earth with sparse trees and shrubs
5171          RS      12    FLOW
5172          RC   0.013   0.013   0.032    2848  0.0018    0.00
5173          RX  100.00  100.10  105.00  115.00  115.10  115.50  132.00  134.00
5174          RY  1001.0 1000.00  999.90  999.60 1000.10 1000.20 1000.30 1000.40
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5175          KK   CPL07COMBINE
5176          HC       3   2.623
              *

5177          KK  DL07SEDIVERT
5178          KM        Paradise at Greenway split flow
5179          DT   DL07S     0.0     0.0
5180          DI     0.0   233.3   660.0  1459.1  2912.5     0.0     0.0     0.0     0.0     0.0
5181          DQ     0.0    47.7   135.0   309.0   902.5     0.0     0.0     0.0     0.0     0.0
              *

5182          KK  L07L08ROUTE
5183          KM        Cross-section: Cross-section determined from A-team survey
5184          KM        Manning's N Value: clean earth; straight
5185          RS       2    FLOW
5186          RC   0.022   0.022   0.022    2557  0.0041    0.00
5187          RX  100.00  100.90  101.00  115.00  127.00  150.00  151.00  152.00
5188          RY  1279.6 1279.50 1277.50 1275.50 1278.50 1279.50 1279.60 1279.70
              *

5189          KK     L08BASIN
5190          KM        BASIN BOUNDARY FROM SURPRISE FARMS
5191          BA   0.485
5192          LG    0.25    0.15    7.30    0.13      36
5193          UI       0      60     185     312     414     606     690     496     373     261
5194          UI     128      94      61      19      19      18      19       0       0       0
5195          UI       0       0       0       0       0       0       0       0       0       0
5196          UI       0       0       0       0       0       0       0       0       0       0
5197          UI       0       0       0       0       0       0       0       0       0       0
              *

5198          KK  DL08REDIVERT
5199          KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A on
5200          KM        same as Tract O), Final Drainage Report for Parcel 13 of Surprise Farms
5201          KM        Drainage Report for Surprise Farms Parcel 9 (Tract K and 9), Final Drai
5202          KM        Parcel 10 & 11 of Surprise Farms (Tract L, M, N), Drainage Report for S
5203          KM        Parcel 15 (Basins A & B only, Basin C in School Site), Drainage Report f
5204          KM        Elementary School No 18, Remaining retention volume estimated based on a
5205          DT    RL08     46.6     0.0
5206          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5207          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5208          KK  DL04SERETRIEVE
5209          DR   DL04S
              *

5210          KK  L04L08ROUTE
5211          KM        Cross-section: Cross-section determined from aerial
5212          KM        Manning's N Value: street and earth with sparse trees and shrubs
5213          RS       1    FLOW
5214          RC   0.013   0.013   0.032    5352  0.0042    0.00
5215          RX  100.00  100.10  100.20  115.20  115.30  115.40  145.00  153.00
5216          RY  1000.0  999.90  999.80  999.50 1000.00 1000.10 1000.20 1000.30
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1                                   HEC-1 INPUT                                                    PAGE132

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

5217          KK   CPL08COMBINE
5218          HC       3   3.739
              *

5219          KK  L08L12ROUTE
5220          KM        Cross-section: Cross-section determined from aerial
5221          KM        Manning's N Value: street, earth with grass and forbs
5222          RS      11    FLOW
5223          RC   0.013   0.025   0.025    5397  0.0031    0.00
5224          RX  100.00  107.00  112.00  116.00  122.00  126.00  165.00  280.00
5225          RY  1248.5 1248.50 1248.00 1247.50 1247.51 1248.00 1248.20 1248.50
              *

5226          KK     L10BASIN
5227          KM        BASIN BOUNDARY FROM SIERRA MONTANA
5228          KM        WADDELL HACIENDAS AND BEARDSLEY CSR
5229          BA   0.844
5230          LG    0.27    0.25    4.55    0.38      18
5231          UI       0      95     240     449     577     766    1141     935     733     554
5232          UI     408     214     156      97      57      29      29      29       0       0
5233          UI       0       0       0       0       0       0       0       0       0       0
5234          UI       0       0       0       0       0       0       0       0       0       0
5235          UI       0       0       0       0       0       0       0       0       0       0
              *

5236          KK  DL10REDIVERT
5237          KM        Final Drainage Report for Sierra Montana Parcel 4 (Basins 1, 2), Drainag
5238          KM        Sierra Montana Parcel 1 (Basins 1,2,3,3A,3B), Drainage Report for Sierra
5239          KM        Parcel 3 (Basins 3,3A,3B,3C), Drainage Report for Sierra Montana Infastr
5240          KM        Phase II (P2 Retention), Sierra Montana Final Drainage Report Parcel 5 (
5241          KM        Sierra Montana Final Drainage Report Parcel 6 (Basins 1,2,3,4,6)
5242          DT    RL10    34.3     0.0
5243          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5244          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5245          KK  L10L11ROUTE
5246          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
5247          KM        on aerial / Manning's N Value: earth with sparse trees and shrubs
5248          RS       3    FLOW
5249          RC   0.032   0.032   0.032    3249  0.0031    0.00
5250          RX  100.00  100.10  100.20  112.00  154.00  166.00  183.00  185.00
5251          RY  1000.2 1000.10 1000.00  997.00  997.00 1000.00 1000.30 1000.40
              *

5252          KK  DL06SERETRIEVE
5253          DR   DL06S
              *
1                                   HEC-1 INPUT                                                    PAGE133

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

5254          KK  L06L11ROUTE
5255          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
5256          KM        on aerial / Manning's N Value: earth w/ sparse trees and shrubs
5257          RS       1    FLOW
5258          RC   0.032   0.032   0.032    8226  0.0043    0.00
5259          RX  100.00  106.00  112.00  124.00  154.00  166.00  172.00  178.00
5260          RY  1290.5 1290.30 1290.00 1287.00 1287.10 1290.00 1290.30 1290.50
              *

5261          KK     L11BASIN
5262          KM        BASIN BOUNDARY FROM SIERRA MONTANA
5263          KM        WADDELL CHANNEL DESIGNED FOR 512 CFS PER DEVELOPMENT RPT
5264          BA   0.622
5265          LG    0.25    0.25    4.90    0.34      34
5266          UI       0      80     264     433     572     903     839     608     452     287
5267          UI     139     100      55      25      25       0       0       0       0       0
5268          UI       0       0       0       0       0       0       0       0       0       0
5269          UI       0       0       0       0       0       0       0       0       0       0
5270          UI       0       0       0       0       0       0       0       0       0       0
              *

5271          KK  DL11REDIVERT
5272          KM        Sierra Montana Parcel 8 (Basins 8, 8A, 8B), Parcel 9 (Basins 9, 9A, 8C),
5273          KM        Parcel 12 (included in Parcel 14 report), Parcel 14 (Basins 1,2,3a,3b,4a
5274          KM        OS4,OS5 (Includes Retention for P14 &12)), Parcel 20 (Basins R20C, R20,
5275          KM        1S and 1N estimated from aerial, Infrastructure Phase I (Retention from
5276          DT    RL11    47.7     0.0
5277          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5278          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5279          KK  DL07SERETRIEVE
5280          DR   DL07S
              *

5281          KK  L07L11ROUTE
5282          KM        Cross-section: 3' deep, 6:1 side slope and 6' bottom width per
5283          KM        Drainage Report for Sierra Montana Infrastructure Phase I (Report 909)
5284          KM        Manning's N Value: earth with sparse trees and shrubs
5285          RS      16    FLOW
5286          RC   0.032   0.032   0.032    8463  0.0026    0.00
5287          RX  100.00  101.00  102.00  120.00  126.00  144.00  145.00  146.00
5288          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
              *

5289          KK   CPL11COMBINE
5290          HC       4   4.089
              *
1                                   HEC-1 INPUT                                                    PAGE134

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

5291          KK  DL11SEDIVERT
5292          KM        Waddell at 173rd alignment split flow
5293          DT   DL11S     0.0     0.0
5294          DI     0.0   309.0  1207.7  2631.3  4439.4     0.0     0.0     0.0     0.0     0.0
5295          DQ     0.0     0.0    22.5   147.6   353.8     0.0     0.0     0.0     0.0     0.0
              *

5296          KK  L11L12ROUTE
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5297          KM        Cross-section: Cross-section determined from aerial
5298          KM        Manning's N Value: earth with grass and forbs
5299          RS       2    FLOW
5300          RC   0.025   0.025   0.025    2002  0.0032    0.00
5301          RX  100.00  110.00  180.00  190.00  200.00  220.00  240.00  240.10
5302          RY  1249.5 1249.00 1248.50 1247.00 1248.50 1248.70 1248.80 1249.50
              *

5303          KK     L12BASIN
5304          KM        BASIN BOUNDARY FROM SIERRA MONTANA, AG LAND AND 1990 TOPO
5305          BA   0.358
5306          LG    0.18    0.23    6.20    0.21      52
5307          UI       0      95     326     506     764     512     313     129      73      20
5308          UI      21       0       0       0       0       0       0       0       0       0
5309          UI       0       0       0       0       0       0       0       0       0       0
5310          UI       0       0       0       0       0       0       0       0       0       0
5311          UI       0       0       0       0       0       0       0       0       0       0
              *

5312          KK  DL12REDIVERT
5313          KM        Sierra Montana Parcel 16 (Basins 10A, 16B), Parcel 15 (Basins 15A, 15B,
5314          KM        Parcel 18 (Basins 18A-D), Sierra Montana Crossings
5315          DT    RL12    32.7     0.0
5316          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5317          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5318          KK   CPL12COMBINE
5319          HC       3   5.563
              *

5320          KK   DL121DIVERT
5321          KM        Waddell at Cotton split flow
5322          DT  DL121S     0.0     0.0
5323          DI     0.0  3141.9  7409.3 13063.4 20317.2     0.0     0.0     0.0     0.0     0.0
5324          DQ     0.0   550.7  2126.5  4314.6  7195.9     0.0     0.0     0.0     0.0     0.0
              *

5325          KK   DL122DIVERT
5326          KM        Waddell at Cotton split flow
5327          DT  DL122S     0.0     0.0
5328          DI     0.0  2591.2  5282.9  8748.8 13121.3     0.0     0.0     0.0     0.0     0.0
5329          DQ     0.0    31.8    90.0   165.3   254.6     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5330          KK  L12L13ROUTE
5331          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5332          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5333          RS       2    FLOW
5334          RC   0.035   0.035   0.035    2537  0.0051    0.00
5335          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5336          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5337          KK   CPL13COMBINE
5338          HC       3   8.905
              *

5339          KK  L13DS5ROUTE
5340          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5341          KM        model received on May 6, 2009 from PB,
5342          KM        Waddell Road to Drop Structure 5-RLP1-1
5343          RS       1    FLOW
5344          RC   0.035   0.015   0.035    2450  0.0035    0.00
5345          RX    0.00    3.00    5.00   17.00   33.00   45.00   65.00   68.00
5346          RY  1227.0 1226.00 1225.90 1220.00 1220.10 1225.90 1226.00 1227.00
              *

5347          KK  DS5L19ROUTE
5348          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5349          KM        model received on May 6, 2009 from PB,
5350          KM        Drop Structure 5 to Cactus Road-RLP1-2
5351          RS       1    FLOW
5352          RC   0.035   0.015   0.035    2632  0.0033    0.00
5353          RX    0.00    3.00    5.00   17.00   42.00   54.00   74.00   77.00
5354          RY  1217.0 1216.00 1215.90 1210.00 1209.90 1215.90 1216.00 1217.00
              *

5355          KK     L14BASIN
5356          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
5357          BA   0.229
5358          LG    0.30    0.25    4.15    0.52      15
5359          UI       0      44     169     252     422     361     242     144      67      38
5360          UI      11      12       0       0       0       0       0       0       0       0
5361          UI       0       0       0       0       0       0       0       0       0       0
5362          UI       0       0       0       0       0       0       0       0       0       0
5363          UI       0       0       0       0       0       0       0       0       0       0
              *

5364          KK  DL14REDIVERT
5365          KM        Additional Retention based on 100yr 2hr retention.
5366          KM        C value is based on future land use, P=2.7, A=acres
5367          DT    RL14    15.6     0.0
5368          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5369          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5370          KK  L14L15ROUTE
5371          KM        Cross-section: Cross-section determined from aerial
5372          KM        Manning's N Value: earth w/ sparse trees and brush
5373          RS       1    FLOW
5374          RC   0.032   0.032   0.032    3624  0.0055    0.00
5375          RX  100.00  101.00  145.00  159.00  171.00  180.00  196.00  197.00
5376          RY  1295.0 1295.00 1294.00 1292.00 1292.00 1294.00 1295.00 1295.00
              *

5377          KK     L15BASIN
5378          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
5379          BA   0.372
5380          LG    0.29    0.24    4.35    0.44      12
5381          UI       0      65     254     377     606     616     416     271     123      74
5382          UI      33      19      18       0       0       0       0       0       0       0
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5383          UI       0       0       0       0       0       0       0       0       0       0
5384          UI       0       0       0       0       0       0       0       0       0       0
5385          UI       0       0       0       0       0       0       0       0       0       0
              *

5386          KK  DL15REDIVERT
5387          KM        Additional Retention based on 100yr 2hr retention.
5388          KM        C value is based on future land use, P=2.7, A=acres
5389          DT    RL15    24.3     0.0
5390          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5391          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5392          KK   CPL15COMBINE
5393          HC       2   0.601
              *

5394          KK  L15L16ROUTE
5395          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5396          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5397          RS       1    FLOW
5398          RC   0.035   0.035   0.035    2662  0.0068    0.00
5399          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5400          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5401          KK     L16BASIN
5402          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND 1990 TOPO
5403          BA   0.502
5404          LG    0.29    0.25    4.25    0.49      19
5405          UI       0      81     329     488     761     852     571     389     185     109
5406          UI      55      24      24       0       0       0       0       0       0       0
5407          UI       0       0       0       0       0       0       0       0       0       0
5408          UI       0       0       0       0       0       0       0       0       0       0
5409          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE137

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

5410          KK  DL16REDIVERT
5411          KM        Additional Retention based on 100yr 2hr retention.
5412          KM        C value is based on future land use, P=2.7, A=acres
5413          DT    RL16    36.7     0.0
5414          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5415          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5416          KK   CPL16COMBINE
5417          HC       2   1.103
              *

5418          KK  L16L17ROUTE
5419          KM        Cross-section: Cross-section determined from Sarah Ann Ranch
5420          KM        report and aerial / Manning's N Value: earth w/grass and forbs
5421          RS       1    FLOW
5422          RC   0.025   0.025   0.025    2699  0.0067    0.00
5423          RX  100.00  101.00  102.00  118.00  138.00  154.00  154.50  155.00
5424          RY  1000.0  999.90  999.80  996.00  996.00  999.80  999.90 1000.00
              *

5425          KK     L17BASIN
5426          KM        BASIN BOUNDARY FROM SARAH ANN RANCH UNIT1 AND UNIT2
5427          BA   0.504
5428          LG    0.25    0.25    4.30    0.48      34
5429          UI       0      68     236     373     508     801     649     477     346     180
5430          UI     112      69      25      21      21       0       0       0       0       0
5431          UI       0       0       0       0       0       0       0       0       0       0
5432          UI       0       0       0       0       0       0       0       0       0       0
5433          UI       0       0       0       0       0       0       0       0       0       0
              *

5434          KK  DL17REDIVERT
5435          KM        Final Drainage Report for Sarah Ann Ranch
5436          DT    RL17    49.0     0.0
5437          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5438          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5439          KK   CPL17COMBINE
5440          HC       2   1.607
              *

5441          KK  DL17SEDIVERT
5442          KM        Cactus at 175th Ave split flow
5443          DT   DL17S     0.0     0.0
5444          DI     0.0   513.8   736.4  1344.5  2447.7     0.0     0.0     0.0     0.0     0.0
5445          DQ     0.0     8.0    70.1   289.8   732.1     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE138

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

5446          KK  L17L18ROUTE
5447          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5448          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5449          RS       1    FLOW
5450          RC   0.035   0.035   0.035    2641  0.0047    0.00
5451          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5452          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5453          KK     L18BASIN
5454          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
5455          BA   0.500
5456          LG    0.30    0.25    4.65    0.38      15
5457          UI       0      83     333     492     783     842     565     380     174     104
5458          UI      51      25      24       0       0       0       0       0       0       0
5459          UI       0       0       0       0       0       0       0       0       0       0
5460          UI       0       0       0       0       0       0       0       0       0       0
5461          UI       0       0       0       0       0       0       0       0       0       0
              *

5462          KK  DL18REDIVERT
5463          KM        Additional Retention based on 100yr 2hr retention.
5464          KM        C value is based on future land use, P=2.7, A=acres
5465          DT    RL18    34.5     0.0
5466          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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5467          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5468          KK  DL11SERETRIEVE
5469          DR   DL11S
              *

5470          KK  L11L18ROUTE
5471          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5472          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5473          RS      11    FLOW
5474          RC   0.035   0.035   0.035    5630  0.0064    0.00
5475          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5476          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5477          KK   DL121RETRIEVE
5478          DR  DL121S
              *

5479          KK  L12L18ROUTE
5480          KM        Cross-section: Cross-section determined from aerial
5481          KM        Manning's N Value: earth with grass and forbs, Ag field
5482          RS       7    FLOW
5483          RC   0.025   0.025   0.038    5298  0.0044    0.00
5484          RX  100.00  100.50  101.00  127.00  145.00  160.70  266.00  375.00
5485          RY  1245.0 1244.90 1244.80 1244.00 1243.90 1244.80 1244.60 1245.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5486          KK   CPL18COMBINE
5487          HC       4    7.67
              *

5488          KK   DL181DIVERT
5489          KM        Cactus at Cotton split flow
5490          DT  DL181S     0.0     0.0
5491          DI     0.0   266.3   983.8  2332.9  4215.1     0.0     0.0     0.0     0.0     0.0
5492          DQ     0.0     0.0    18.6    70.5   191.6     0.0     0.0     0.0     0.0     0.0
              *

5493          KK   DL182DIVERT
5494          KM        Cactus at Cotton split flow
5495          DT  DL182S     0.0     0.0
5496          DI     0.0   266.3   965.1  2262.4  4023.5     0.0     0.0     0.0     0.0     0.0
5497          DQ     0.0    12.7    36.0    66.1   101.8     0.0     0.0     0.0     0.0     0.0
              *

5498          KK  L18L19ROUTE
5499          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5500          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5501          RS       4    FLOW
5502          RC   0.035   0.035   0.035    2608  0.0042    0.00
5503          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5504          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5505          KK     L19BASIN
5506          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
5507          BA   0.488
5508          LG    0.10    0.25    4.45    0.53      80
5509          UI       0     181     583    1050     982     580     227     105      34      33
5510          UI       0       0       0       0       0       0       0       0       0       0
5511          UI       0       0       0       0       0       0       0       0       0       0
5512          UI       0       0       0       0       0       0       0       0       0       0
5513          UI       0       0       0       0       0       0       0       0       0       0
              *

5514          KK  DL19REDIVERT
5515          KM        Additional Retention based on 100yr 2hr retention.
5516          KM        C value is based on future land use, P=2.7, A=acres
5517          DT    RL19    51.2     0.0
5518          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5519          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5520          KK   DL122RETRIEVE
5521          DR  DL122S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5522          KK  L12L19ROUTE
5523          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5524          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5525          RS      16    FLOW
5526          RC   0.035   0.035   0.035    5877  0.0045    0.00
5527          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5528          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5529          KK   CPL19COMBINE
5530          HC       4    11.5
              *

5531          KK  L19DS7ROUTE
5532          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5533          KM        model received on May 6, 2009 from PB,
5534          KM        Cactus Road to Drop Structure 7-RLP1-2
5535          RS       1    FLOW
5536          RC   0.035   0.015   0.035    2065  0.0040    0.00
5537          RX    0.00    3.00    5.00   17.00   52.00   64.00   84.00   87.00
5538          RY  1204.0 1203.00 1202.90 1197.00 1196.90 1202.90 1203.00 1204.00
              *

5539          KK  DS7L27ROUTE
5540          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5541          KM        model received on May 6, 2009 from PB,
5542          KM        Drop Structure 7 to Peoria Ave-RLP2-2
5543          RS       1    FLOW
5544          RC   0.035   0.015   0.035    3055  0.0033    0.00
5545          RX    0.00    3.00    5.00   17.00   62.00   74.00   94.00   97.00
5546          RY  1196.0 1195.00 1194.90 1189.00 1188.90 1194.90 1195.00 1196.00
              *
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```
5547          KK     L23BASIN
5548          KM        BASIN BOUNDARY FROM BEARDSLEY CSR AND 1990 TOPO
5549          BA   0.905
5550          LG    0.29     0.25     4.30     0.48       17
5551          UI       0      117      380      624      819     1304     1228      891      664      424
5552          UI     201      148       83       36       36       36        0        0        0        0
5553          UI       0        0        0        0        0        0        0        0        0        0
5554          UI       0        0        0        0        0        0        0        0        0        0
5555          UI       0        0        0        0        0        0        0        0        0        0
              *

5556          KK  DL23REDIVERT
5557          KM        Additional Retention based on 100yr 2hr retention.
5558          KM        C value is based on future land use, P=2.7, A=acres
5559          DT    RL23     62.9      0.0
5560          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5561          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
1                                          HEC-1 INPUT                                                    PAGE141

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

5562          KK  L23L24ROUTE
5563          KM        Cross-section: Cross-section determined from aerial
5564          KM        Manning's N Value: clean earth; straight
5565          RS       1    FLOW
5566          RC   0.022    0.022    0.022     2628   0.0080     0.00
5567          RX  100.00   101.00   161.00   175.00   189.00   203.00   228.00   229.00
5568          RY  1000.8  1000.30  1000.00   998.00   997.90  1000.00  1000.40  1000.80
              *

5569          KK     L24BASIN
5570          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
5571          BA   0.498
5572          LG    0.29     0.25     4.45     0.43       19
5573          UI       0       96      362      545      899      798      529      321      144       85
5574          UI      26       26       25        0        0        0        0        0        0        0
5575          UI       0        0        0        0        0        0        0        0        0        0
5576          UI       0        0        0        0        0        0        0        0        0        0
5577          UI       0        0        0        0        0        0        0        0        0        0
              *

5578          KK  DL24REDIVERT
5579          KM        Additional Retention based on 100yr 2hr retention.
5580          KM        C value is based on future land use, P=2.7, A=acres
5581          DT    RL24     37.3      0.0
5582          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5583          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5584          KK   CPL24COMBINE
5585          HC       2    1.403
              *

5586          KK  L24L26ROUTE
5587          KM        Cross-section: Cross-section determined from aerial
5588          KM        Manning's N Value: clean earth; straight
5589          RS       1    FLOW
5590          RC   0.022    0.022    0.022     5301   0.0074     0.00
5591          RX  100.00   200.00   279.00   286.00   289.00   295.00   311.00   315.00
5592          RY  1207.3  1206.50  1206.00  1204.00  1203.90  1206.50  1207.00  1207.25
              *

5593          KK     L25BASIN
5594          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
5595          KM        AG LAND, AND EASTERN AG CHANNEL
5596          BA   0.244
5597          LG    0.30     0.25     4.65     0.38       15
5598          UI       0       32      100      168      220      349      330      242      178      117
5599          UI      55       41       24        9       10       10        0        0        0        0
5600          UI       0        0        0        0        0        0        0        0        0        0
5601          UI       0        0        0        0        0        0        0        0        0        0
5602          UI       0        0        0        0        0        0        0        0        0        0
              *
1                                          HEC-1 INPUT                                                    PAGE142

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

5603          KK  DL25REDIVERT
5604          KM        Additional Retention based on 100yr 2hr retention.
5605          KM        C value is based on future land use, P=2.7, A=acres
5606          DT    RL25     16.8      0.0
5607          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5608          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5609          KK  L25L26ROUTE
5610          KM        Cross-section: Cross-section determined from aerial
5611          KM        Manning's N Value: clean earth; straight
5612          RS       1    FLOW
5613          RC   0.022    0.022    0.013     5339   0.0073     0.00
5614          RX  100.00   105.00   109.00   116.00   119.00   125.00   141.00   145.00
5615          RY  1206.2  1206.10  1206.00  1204.00  1203.90  1206.50  1207.00  1207.20
              *

5616          KK   DL181RETRIEVE
5617          DR  DL181S
              *

5618          KK  L18L26ROUTE
5619          KM        Cross-section: Cross-section determined from 1992 topo
5620          KM        Manning's N Value: half street, clean earth
5621          RS       1    FLOW
5622          RC   0.013    0.022    0.022     5297   0.0130     0.00
5623          RX  100.00   105.00   112.00   121.00   139.00   153.00   154.00   154.00
5624          RY  1206.7  1206.60  1206.50  1206.00  1206.00  1208.00  1208.10  1208.20
              *

5625          KK  DL17SERETRIEVE
5626          DR   DL17S
              *

5627          KK  L17L26ROUTE
5628          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5629          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5630          RS       1    FLOW
5631          RC   0.035    0.035    0.035     6336   0.0059     0.00
5632          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
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5633          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5634          KK     L26BASIN
5635          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
5636          BA   0.757
5637          LG    0.26     0.25     4.55     0.42       28
5638          UI       0      141      539      801     1316     1236      813      517      228      139
5639          UI      48       39       38        0        0        0        0        0        0        0
5640          UI       0        0        0        0        0        0        0        0        0        0
5641          UI       0        0        0        0        0        0        0        0        0        0
5642          UI       0        0        0        0        0        0        0        0        0        0
              *
1                                          HEC-1 INPUT                                                    PAGE143

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

5643          KK  DL26REDIVERT
5644          KM        Additional Retention based on 100yr 2hr retention.
5645          KM        C value is based on future land use, P=2.7, A=acres
5646          DT    RL26     58.4      0.0
5647          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5648          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5649          KK   CPL26COMBINE
5650          HC       5  10.074
              *

5651          KK  DL26SEDIVERT
5652          KM        Peoria at Cotton Split flow
5653          DT   DL26S      0.0      0.0
5654          DI     0.0    190.7    867.7   2116.3   3794.4      0.0      0.0      0.0      0.0      0.0
5655          DQ     0.0      0.0      4.0     26.4     59.2      0.0      0.0      0.0      0.0      0.0
              *

5656          KK  L26L27ROUTE
5657          KM        Cross-section: Cross-section determined from aerial
5658          KM        Manning's N Value: clean earth, street
5659          RS       1     FLOW
5660          RC   0.022    0.022    0.013     2725   0.0070     0.00
5661          RX  100.00   100.50   363.00   373.00   378.00   388.00   400.00   401.00
5662          RY  1202.6  1202.10  1202.00  1200.00  1200.10  1202.00  1202.20  1205.55
              *

5663          KK     L27BASIN
5664          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
5665          KM        AG LAND, EASTERN BOUNDARY LOOP 303
5666          BA   0.508
5667          LG    0.11     0.25     4.65     0.46       78
5668          UI       0      183      595     1052     1037      620      251      119       34       34
5669          UI       0        0        0        0        0        0        0        0        0        0
5670          UI       0        0        0        0        0        0        0        0        0        0
5671          UI       0        0        0        0        0        0        0        0        0        0
5672          UI       0        0        0        0        0        0        0        0        0        0
              *

5673          KK  DL27REDIVERT
5674          KM        Additional Retention based on 100yr 2hr retention.
5675          KM        C value is based on future land use, P=2.7, A=acres
5676          DT    RL27     50.9      0.0
5677          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5678          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5679          KK   DL182RETRIEVE
5680          DR  DL182S
              *
1                                          HEC-1 INPUT                                                    PAGE144

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

5681          KK  L18L27ROUTE
5682          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5683          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5684          RS      14     FLOW
5685          RC   0.035    0.035    0.035     5929   0.0061     0.00
5686          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
5687          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
              *

5688          KK   CPL27COMBINE
5689          HC       4  14.412
              *

5690          KK  L27L34ROUTE
5691          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5692          KM        model received on May 6, 2009 from PB,
5693          KM        Peoria Ave to CP in L34-RLP3-1
5694          RS       1     FLOW
5695          RC   0.035    0.022    0.035     2233   0.0034     0.00
5696          RX    0.00     3.00     5.00    17.00    62.00    74.00    94.00    97.00
5697          RY  1177.0  1176.00  1175.90  1170.00  1169.90  1176.00  1176.00  1177.00
              *

5698          KK  DL34BNDIVERT
5699          KM        OLIVE BASIN DIVERT-DLP3A FROM EX_SPLIT.DAT MODEL
5700          DT  DL34BR      0.0      0.0
5701          DI     0.0    415.0   1000.0   1500.0   2000.0   2500.0   3000.0   3500.0   4000.0   4500.0
5702          DQ     0.0      0.0    356.0    688.0    956.0   1301.0   1714.0   2144.0   2567.0   3027.0
              *

5703          KK  DL34BNRETRIEVE
5704          DR  DL34BR
              *

5705          KK  SRL34BSTORAGE
5706          KM        STORAGE THROUGH OLIVE BASIN,
5707          KM        EX_SPLIT.DAT MODEL FROM PB, MAY 6, 2009
5708          KO
5709          RS       1     STOR
5710          SV            1.76     6.08    14.84    92.90   207.45   310.42   338.42   366.89   395.64
5711          SQ           11.00    36.50    59.50    87.90   125.40   531.20  1478.50  2805.30  5584.10
5712          SE  1157.0  1158.00  1159.00  1160.00  1164.00  1169.00  1173.00  1174.00  1175.00  1176.00
5713          ST
              *

5714          KK   CPL34COMBINE
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5715        HC       2  14.412
            *
1                                   HEC-1 INPUT                                                    PAGE145

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

5716        KK  L34B34ROUTE
5717        KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5718        KM        model received on May 6, 2009 from PB,
5719        KM        Olive Basin overflow combine to Olive Road-RLP3-2
5720        RS       1    FLOW
5721        RC   0.035   0.015   0.035    2685  0.0026    0.00
5722        RX    0.00    3.00    5.00   15.00   41.00   51.00   71.00   74.00
5723        RY  1174.0 1173.00 1173.00 1167.00 1167.00 1173.00 1173.00 1174.00
            *

5724        KK     L33BASIN
5725        KM        BASIN BOUNDARY FROM LARGE LOT HOMES OF MARICOPA COUNTY
5726        BA   0.651
5727        LG    0.30    0.25    4.30    0.41       6
5728        UI       0      77     214     383     496     696     927     689     534     398
5729        UI     242     134      96      61      24      24      23       0       0       0
5730        UI       0       0       0       0       0       0       0       0       0       0
5731        UI       0       0       0       0       0       0       0       0       0       0
5732        UI       0       0       0       0       0       0       0       0       0       0
            *

5733        KK  DL33REDIVERT
5734        KM        Additional Retention based on 100yr 2hr retention.
5735        KM        C value is based on future land use, P=2.7, A=acres
5736        DT    RL33    10.9     0.0
5737        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5738        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

5739        KK  DL33SEDIVERT
5740        KM        Olive at Cotton split flow
5741        DT   DL33S     0.0     0.0
5742        DI     0.0   200.5   987.1  2321.7  4115.5     0.0     0.0     0.0     0.0     0.0
5743        DQ     0.0     0.0     2.7    97.9   266.6     0.0     0.0     0.0     0.0     0.0
            *

5744        KK  L33L34ROUTE
5745        KM        Cross-section: Cross-section determined from 1991 topo and
5746        KM        aerial/ Manning's N Value: earth w/ sparse trees and brush
5747        RS       2    FLOW
5748        RC   0.032   0.032   0.032    2761  0.0051    0.00
5749        RX  100.00  106.00  112.00  124.00  130.00  142.00  162.00  182.00
5750        RY  1178.2 1178.10 1178.00 1174.00 1174.10 1176.00 1176.20 1176.30
            *

5751        KK     L34BASIN
5752        KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
5753        KM        EASTERN BOUNDARY LOOP 303
5754        BA   0.515
5755        LG    0.10    0.25    4.40    0.54      80
5756        UI       0     186     603    1066    1052     628     254     121      35      34
5757        UI       0       0       0       0       0       0       0       0       0       0
5758        UI       0       0       0       0       0       0       0       0       0       0
5759        UI       0       0       0       0       0       0       0       0       0       0
1                                   HEC-1 INPUT                                                    PAGE146

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

5760        UI       0       0       0       0       0       0       0       0       0       0
            *

5761        KK  DL34REDIVERT
5762        KM        Additional Retention based on 100yr 2hr retention.
5763        KM        C value is based on future land use, P=2.7, A=acres
5764        DT    RL34    54.4     0.0
5765        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5766        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

5767        KK  DL26SERETRIEVE
5768        DR   DL26S
            *

5769        KK  L26L34ROUTE
5770        KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5771        KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5772        RS       1    FLOW
5773        RC   0.035   0.035   0.035    5936  0.0062    0.00
5774        RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5775        RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
            *

5776        KK  CPL34BCOMBINE
5777        HC       4  15.578
            *

5778        KK  34DS11ROUTE
5779        KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5780        KM        model received on May 6, 2009 from PB,
5781        KM        Olive Road to Drop Structure 11-RLP4-1
5782        RS       1    FLOW
5783        RC   0.035   0.015   0.035    1942  0.0046    0.00
5784        RX    0.00    3.00    5.00   16.00   42.00   53.00   73.00   76.00
5785        RY  1161.5 1160.50 1160.50 1155.00 1155.00 1160.50 1160.50 1161.50
            *

5786        KK  DS1139ROUTE
5787        KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5788        KM        model received on May 6, 2009 from PB,
5789        KM        Drop Structure 11 to CP in L39-RLP4-2
5790        RS       1    FLOW
5791        RC   0.035   0.015   0.035    1075  0.0032    0.00
5792        RX    0.00    3.00    5.00   17.00   53.00   65.00   75.00   78.00
5793        RY  1150.0 1149.00 1149.00 1143.00 1143.00 1149.00 1149.00 1150.00
            *

5794        KK    L39ABASIN
5795        KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
5796        KM        AND EASTERN BOUNDARY LOOP 303
5797        BA   0.261
5798        LG    0.10    0.25    4.10    0.64      79
5799        UI       0     272     860     647     183      42       0       0       0       0
5800        UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5801          UI       0       0       0       0       0       0       0       0       0       0
5802          UI       0       0       0       0       0       0       0       0       0       0
5803          UI       0       0       0       0       0       0       0       0       0       0
              *

5804          KK  CPL39ACOMBINE
5805          HC       2  15.839
              *

5806          KK  DL39BNDIVERT
5807          KM        NORTHERN BASIN DIVERT-2DLP5 FROM EX_SPLIT.DAT MODEL
5808          DT  DL39BR     0.0     0.0
5809          DI     0.0   407.0  1000.0  1500.0  2000.0  2500.0  3000.0     0.0     0.0     0.0
5810          DQ     0.0     0.0   263.0   508.0   778.0  1115.0  1452.0     0.0     0.0     0.0
              *

5811          KK     L28BASIN
5812          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, EASTERN BOUNDARY OF CORTESSA
5813          BA   0.312
5814          LG    0.24    0.25    4.25    0.49      29
5815          UI       0      63     237     355     587     488     324     184      86      47
5816          UI      16      17       0       0       0       0       0       0       0       0
5817          UI       0       0       0       0       0       0       0       0       0       0
5818          UI       0       0       0       0       0       0       0       0       0       0
5819          UI       0       0       0       0       0       0       0       0       0       0
              *

5820          KK  DL28REDIVERT
5821          KM        Additional Retention based on 100yr 2hr retention.
5822          KM        C value is based on future land use, P=2.7, A=acres
5823          DT    RL28    21.8     0.0
5824          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5825          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5826          KK  L28L29ROUTE
5827          KM        Cross-section: Cross-section determined from 1990 topo
5828          KM        Manning's N Value: earth w/ sparse trees and brush
5829          RS      15    FLOW
5830          RC   0.032   0.032   0.032    3315  0.0060    0.00
5831          RX  100.00  118.00  134.00  164.00  199.00  243.00  252.00  262.00
5832          RY  1270.0 1269.00 1268.00 1266.00 1265.90 1268.00 1269.00 1270.00
              *

5833          KK     L29BASIN
5834          KM        BASIN BOUNDARY FROM 1990 TOPO, 2008 TOPO AT INTERSECTION
5835          KM        AND FIELD VISIT, WESTERN BOUNDARY DEFINED BY BEARDSLEY CSR
5836          KM        EASTERN BOUNDARY OF CORTESSA
5837          BA   0.245
5838          LG    0.21    0.24    4.40    0.49      33
5839          UI       0      37     149     222     332     423     291     200     111      60
5840          UI      35      11      12      11       0       0       0       0       0       0
5841          UI       0       0       0       0       0       0       0       0       0       0
5842          UI       0       0       0       0       0       0       0       0       0       0
5843          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5844          KK  DL29REDIVERT
5845          KM        Additional Retention based on 100yr 2hr retention.
5846          KM        C value is based on future land use, P=2.7, A=acres
5847          DT    RL29    19.2     0.0
5848          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5849          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5850          KK   CPL29COMBINE
5851          HC       2   0.557
              *

5852          KK  DL29SEDIVERT
5853          KM        Diversion at canal overtopping, assume 50-50 split
5854          DT   DL29S     0.0     0.0
5855          DI     0.0   100.0  1000.0  5000.0 10000.0     0.0     0.0     0.0     0.0     0.0
5856          DQ     0.0    50.0   500.0  2500.0  5000.0     0.0     0.0     0.0     0.0     0.0
              *

5857          KK  L29L36ROUTE
5858          KM        Cross-section: Estimated 5' deep and 6:1 side slopes, width based
5859          KM        on aerial / Manning's N Value: clean earth; straight
5860          RS      15    FLOW
5861          RC   0.022   0.022   0.022    6696  0.0066    0.00
5862          RX  100.00  112.00  121.00  151.00  186.00  216.00  228.00  244.00
5863          RY  1220.5 1220.30 1220.00 1215.00 1215.10 1220.00 1220.30 1220.50
              *

5864          KK     L35BASIN
5865          KM        BASIN BOUNDARY FROM 1990 TOPO AND FIELD VISIT
5866          BA   0.517
5867          LG    0.23    0.25    4.45    0.44      35
5868          UI       0     113     411     615    1023     793     513     268     134      65
5869          UI      28      28       0       0       0       0       0       0       0       0
5870          UI       0       0       0       0       0       0       0       0       0       0
5871          UI       0       0       0       0       0       0       0       0       0       0
5872          UI       0       0       0       0       0       0       0       0       0       0
              *

5873          KK  DL35REDIVERT
5874          KM        Additional Retention based on 100yr 2hr retention.
5875          KM        C value is based on future land use, P=2.7, A=acres
5876          DT    RL35    45.4     0.0
5877          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5878          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5879          KK  DL29SERETRIEVE
5880          DR   DL29S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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5881          KK  L29L35ROUTE
5882          KM        Cross-section: Cross-section determined from aerial
5883          KM        Manning's N Value: earth w/ sparse trees and brush
5884          RS      24    FLOW
5885          RC   0.032   0.032   0.032    3510  0.0006    0.00
5886          RX  100.00  120.00  140.00  145.00  155.00  160.00  180.00  200.00
5887          RY  1234.0 1233.50 1233.00 1231.50 1231.50 1232.00 1232.00 1232.00
              *

5888          KK   CPL35COMBINE
5889          HC       2   1.074
              *

5890          KK  L35L37ROUTE
5891          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
5892          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
5893          RS      16    FLOW
5894          RC   0.035   0.035   0.035    6221  0.0058    0.00
5895          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
5896          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

5897          KK     L37BASIN
5898          KM        BASIN BOUNDARY FROM NORTH EASTERN BASIN BOUNDARY
5899          KM        AND ENGINEERED CHANNEL
5900          BA   0.399
5901          LG    0.23    0.25    4.15    0.53      26
5902          UI       0      78     289     436     721     639     424     257     115      69
5903          UI      21      20      21       0       0       0       0       0       0       0
5904          UI       0       0       0       0       0       0       0       0       0       0
5905          UI       0       0       0       0       0       0       0       0       0       0
5906          UI       0       0       0       0       0       0       0       0       0       0
              *

5907          KK  DL37REDIVERT
5908          KM        Additional Retention based on 100yr 2hr retention.
5909          KM        C value is based on future land use, P=2.7, A=acres
5910          DT    RL37    26.5     0.0
5911          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5912          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5913          KK     L36BASIN
5914          KM        BASIN BOUNDARY FROM WHITE TANK FOOTHILLS / CORTESSA
5915          KM        SW BOUNDARY BASED ON ENGINEERED CHANNEL
5916          BA   0.466
5917          LG    0.22    0.25    4.10    0.57      38
5918          UI       0     100     366     552     910     720     469     246     123      60
5919          UI      25      25       0       0       0       0       0       0       0       0
5920          UI       0       0       0       0       0       0       0       0       0       0
5921          UI       0       0       0       0       0       0       0       0       0       0
5922          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5923          KK  DL36REDIVERT
5924          KM        Retention volume estimated based on aerial
5925          DT    RL36    75.1     0.0
5926          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5927          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5928          KK   CPL36COMBINE
5929          HC       4   1.939
              *

5930          KK  L36L38ROUTE
5931          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
5932          KM        model received on May 6, 2009 from PB,
5933          KM        Citrus Rd to Cotton Rd-RNR2
5934          RS       9    FLOW
5935          RC   0.030   0.030   0.030    5316  0.0028    0.00
5936          RX    0.00   36.60   42.60   48.60   54.60   60.60   66.60  103.20
5937          RY  1190.6 1184.50 1184.50 1184.50 1184.50 1184.50 1184.50 1190.60
              *

5938          KK     L30BASIN
5939          KM        BASIN BOUNDARY FROM CORTESSA
5940          BA   0.535
5941          LG    0.26    0.25    4.55    0.39      34
5942          UI       0      90     357     532     844     903     600     406     181     110
5943          UI      52      26      26       0       0       0       0       0       0       0
5944          UI       0       0       0       0       0       0       0       0       0       0
5945          UI       0       0       0       0       0       0       0       0       0       0
5946          UI       0       0       0       0       0       0       0       0       0       0
              *

5947          KK  DL30REDIVERT
5948          KM        Retention volume estimated based on aerial
5949          DT    RL30    40.0     0.0
5950          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5951          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5952          KK  L30L31ROUTE
5953          KM        Cross-section: Cross section estimated from aerial; road
5954          KM        Manning's N Value: earth w/ sparse trees and shrubs; street ROB
5955          RS       5    FLOW
5956          RC   0.032   0.032   0.016    2808  0.0078    0.00
5957          RX  100.00  101.00  102.00  114.00  116.00  128.00  148.00  168.00
5958          RY  1227.0 1226.00 1225.00 1223.00 1223.10 1225.00 1225.10 1225.20
              *

5959          KK     L31BASIN
5960          KM        BASIN BOUNDARY FROM CORTESSA
5961          BA   0.422
5962          LG    0.26    0.25    4.45    0.42      37
5963          UI       0     201     621    1099     766     366     136      41      32       0
5964          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5965          UI       0       0       0       0       0       0       0       0       0       0
5966          UI       0       0       0       0       0       0       0       0       0       0
5967          UI       0       0       0       0       0       0       0       0       0       0
              *
```

```
5968          KK  DL31REDIVERT
5969          KM       Retention volume estimated based on aerial
5970          DT    RL31    31.6     0.0
5971          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5972          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5973          KK   CPL31COMBINE
5974          HC       2   0.957
              *

5975          KK  L31L32ROUTE
5976          KM       Cross-section: Estimated 2' deep and 6:1 side slopes, width based on
5977          KM       aerial / Manning's N Value: clean earth; straight; ROB street
5978          RS      13    FLOW
5979          RC   0.022   0.022   0.016    3746  0.0069    0.00
5980          RX  100.00  120.00  140.00  152.00  154.00  166.00  176.00  186.00
5981          RY  1194.5 1194.30 1194.00 1192.00 1192.10 1194.00 1194.30 1194.50
              *

5982          KK     L32BASIN
5983          KM       BASIN BOUNDARY FROM CORTESSA
5984          BA   0.352
5985          LG    0.30    0.25    4.10    0.46       5
5986          UI       0      81     287     432     711     534     344     166      88      39
5987          UI      19      19       0       0       0       0       0       0       0       0
5988          UI       0       0       0       0       0       0       0       0       0       0
5989          UI       0       0       0       0       0       0       0       0       0       0
5990          UI       0       0       0       0       0       0       0       0       0       0
              *

5991          KK  DL32REDIVERT
5992          KM       Additional Retention based on 100yr 2hr retention.
5993          KM       C value is based on future land use, P=2.7, A=acres
5994          DT    RL32    20.7     0.0
5995          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5996          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5997          KK   CPL32COMBINE
5998          HC       2   1.309
              *

5999          KK  L32L38ROUTE
6000          KM       Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6001          KM       6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6002          RS       6    FLOW
6003          RC   0.035   0.035   0.035    5549  0.0068    0.00
6004          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6005          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6006          KK     L38BASIN
6007          KM       BASIN BOUNDARY FROM AERIAL PHOTOGRAPHYAND AG LAND
6008          BA   1.005
6009          LG    0.29    0.25    4.60    0.34       6
6010          UI       0     142     522     804    1126    1712    1246     903     612     286
6011          UI     188     104      44      43      45       0       0       0       0       0
6012          UI       0       0       0       0       0       0       0       0       0       0
6013          UI       0       0       0       0       0       0       0       0       0       0
6014          UI       0       0       0       0       0       0       0       0       0       0
              *

6015          KK  DL38REDIVERT
6016          KM       Additional Retention based on 100yr 2hr retention.
6017          KM       C value is based on future land use, P=2.7, A=acres
6018          DT    RL38    48.0     0.0
6019          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6020          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6021          KK  DL33SERETRIEVE
6022          DR   DL33S
              *

6023          KK  L33L38ROUTE
6024          KM       Cross-section: Estimated 3' deep and 4:1 side slopes, width based
6025          KM       on aerial / Manning's N Value: clean earth; straight, street LOB
6026          RS      13    FLOW
6027          RC   0.016   0.022   0.022    5310  0.0060    0.00
6028          RX  100.00  112.00  124.00  132.00  140.00  148.00  168.00  188.00
6029          RY  1170.5 1170.30 1170.00 1167.00 1167.10 1170.00 1170.30 1170.50
              *

6030          KK   CPL38COMBINE
6031          HC       4   4.904
              *

6032          KK  L38L39ROUTE
6033          KM       Cross-section: Cross-section determined from
6034          KM       EX_SPLIT.DAT model received on May 6, 2009 from PB,
6035          KM       Cotton Rd to Northern Basin-RNR3
6036          RS       4    FLOW
6037          RC   0.038   0.022   0.013    2555  0.0039    0.00
6038          RX  100.00  101.00  550.00  555.00  562.00  566.00  580.00  595.00
6039          RY  1146.8 1146.20 1146.00 1144.50 1144.60 1146.00 1146.20 1146.80
              *

6040          KK     L39BASIN
6041          KM       BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
6042          KM       AND EASTERN BOUNDARY LOOP 303
6043          BA   0.246
6044          LG    0.10    0.25    4.45    0.52      80
6045          UI       0     251     803     608     183      42       0       0       0       0
6046          UI       0       0       0       0       0       0       0       0       0       0
6047          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6048          UI       0       0       0       0       0       0       0       0       0       0
6049          UI       0       0       0       0       0       0       0       0       0       0
              *

6050          KK  DL39REDIVERT
```

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6051          KM        Additional Retention based on 100yr 2hr retention.
6052          KM        C value is based on future land use, P=2.7, A=acres
6053          DT    RL39     52.5     0.0
6054          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6055          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6056          KK  DL39BNRETRIEVE
6057          DR  DL39BR
              *

6058          KK  CPL39BCOMBINE
6059          HC       3  20.338
              *

6060          KK  SRL39BSTORAGE
6061          KM        STORAGE THROUGH NORTHERN BASIN,
6062          KM        EX_SPLIT.DAT MODEL FROM PB, MAY 6, 2009
6063          KO
6064          RS       1    STOR
6065          SV            1.55    5.79   14.58   51.34  127.03  207.82  293.85  323.72  355.57
6066          SQ           16.20   56.50   35.50   83.50   97.60  123.80  301.70  369.10 1007.60
6067          SE  1124.0 1125.00 1126.00 1127.00 1129.00 1132.00 1135.00 1138.00 1139.00 1140.00
6068          ST
              *

6069          KK   CPL39COMBINE
6070          HC       2  20.338
              *

6071          KK  39DS13ROUTE
6072          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
6073          KM        model received on May 6, 2009 from PB,
6074          KM        Northern to Drop Structure 13-RLP5-1
6075          RS       1    FLOW
6076          RC   0.035   0.015   0.035    2427  0.0034    0.00
6077          RX    0.00   10.00   13.00   23.00   43.00   53.00   73.00   74.80
6078          RY  1130.0 1130.00 1129.00 1124.00 1124.00 1129.00 1129.40 1130.00
              *

6079          KK  DS1344ROUTE
6080          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
6081          KM        model received on May 6, 2009 from PB,
6082          KM        Drop Structure 13 to Glendale Ave-RLP5-2
6083          RS      16    FLOW
6084          RC   0.035   0.015   0.035    2700  0.0028    0.00
6085          RX    0.00   10.00   13.00   25.00   47.00   59.00   79.00   80.80
6086          RY  1121.0 1121.00 1120.00 1114.00 1114.00 1120.00 1120.40 1130.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6087          KK     L41BASIN
6088          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6089          BA   0.249
6090          LG    0.30    0.25    4.60    0.34       5
6091          UI       0      34     111     182     242     390     324     238     174      96
6092          UI      56      36      15      10      10       0       0       0       0       0
6093          UI       0       0       0       0       0       0       0       0       0       0
6094          UI       0       0       0       0       0       0       0       0       0       0
6095          UI       0       0       0       0       0       0       0       0       0       0
              *

6096          KK  DL41SEDIVERT
6097          KM        Glendale at 185th split flow
6098          DT   DL41S     0.0     0.0
6099          DI     0.0    15.2   324.4  1021.5  2211.8     0.0     0.0     0.0     0.0     0.0
6100          DQ     0.0    15.2   203.0   611.7  1283.9     0.0     0.0     0.0     0.0     0.0
              *

6101          KK  L41L42ROUTE
6102          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width based
6103          KM        on aerial / Manning's N Value: clean earth; straight, street ROB
6104          RS       2    FLOW
6105          RC   0.022   0.022   0.016    3951  0.0040    0.00
6106          RX  100.00  115.00  130.00  136.00  139.00  145.00  157.00  167.00
6107          RY  1166.5 1166.30 1166.00 1164.00 1164.10 1166.00 1166.30 1166.50
              *

6108          KK     L42BASIN
6109          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6110          BA   0.740
6111          LG    0.30    0.25    4.10    0.46       5
6112          UI       0      71     131     293     382     473     598     865     732     581
6113          UI     463     367     265     144     118      77      60      22      22      22
6114          UI      22      21       0       0       0       0       0       0       0       0
6115          UI       0       0       0       0       0       0       0       0       0       0
6116          UI       0       0       0       0       0       0       0       0       0       0
              *

6117          KK   CPL42COMBINE
6118          HC       2   0.989
              *

6119          KK   DL421DIVERT
6120          KM        Glendale at Citrus split flow
6121          DT  DL421S     0.0     0.0
6122          DI     0.0   189.3   751.3  2087.6  4053.5     0.0     0.0     0.0     0.0     0.0
6123          DQ     0.0    91.1   387.9  1123.4  2232.7     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6124          KK   DL422DIVERT
6125          KM        Glendale at Citrus split flow
6126          DT  DL422S     0.0     0.0
6127          DI     0.0    98.2   363.4   964.2  1820.8     0.0     0.0     0.0     0.0     0.0
6128          DQ     0.0    30.7    76.1   133.6   200.9     0.0     0.0     0.0     0.0     0.0
              *

6129          KK  L42L43ROUTE
6130          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
6131          KM        based on aerial / Manning's N Value: clean earth;
6132          KM        straight, street ROB
6133          RS       5    FLOW
6134          RC   0.022   0.022   0.013    5319  0.0056    0.00
```

```
6135          RX  100.00  100.50  224.00  230.00  233.00  239.00  262.50  263.00
6136          RY  1136.7 1136.50 1136.00 1134.00 1134.10 1136.35 1136.50 1136.65
              *

6137          KK     L43BASIN
6138          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6139          BA   0.997
6140          LG    0.30    0.25    4.20    0.43       5
6141          UI       0     128     405     675     889    1378    1368     994     741     490
6142          UI     235     172     102      40      39      39       0       0       0       0
6143          UI       0       0       0       0       0       0       0       0       0       0
6144          UI       0       0       0       0       0       0       0       0       0       0
6145          UI       0       0       0       0       0       0       0       0       0       0
              *

6146          KK  DL43REDIVERT
6147          KM        Additional Retention based on 100yr 2hr retention.
6148          KM        C value is based on future land use, P=2.7, A=acres
6149          DT    RL43     1.0     0.0
6150          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6151          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6152          KK   CPL43COMBINE
6153          HC       2   1.986
              *

6154          KK   DL431DIVERT
6155          KM        Glendale at Cotton split flow
6156          DT  DL431S     0.0     0.0
6157          DI     0.0   174.4  1002.0  2334.9  4460.0     0.0     0.0     0.0     0.0     0.0
6158          DQ     0.0     0.0     3.8    19.5    58.9     0.0     0.0     0.0     0.0     0.0
              *

6159          KK   DL432DIVERT
6160          KM        Glendale at Cotton split flow
6161          DT  DL432S     0.0     0.0
6162          DI     0.0   174.4   998.2  2315.4  4401.1     0.0     0.0     0.0     0.0     0.0
6163          DQ     0.0     0.6    20.8    54.9    98.4     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6164          KK  L43L44ROUTE
6165          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
6166          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
6167          RS       2    FLOW
6168          RC   0.038   0.032   0.013    2574  0.0039    0.00
6169          RX  100.00  105.00  430.00  444.00  449.00  463.00  478.00  479.00
6170          RY  1126.8 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.80
              *

6171          KK     L44BASIN
6172          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
6173          KM        AND EASTERN BOUNDARY LOOP 303
6174          BA   0.478
6175          LG    0.10    0.25    4.15    0.63      79
6176          UI       0     183     585    1053     955     555     212      93      33      33
6177          UI       0       0       0       0       0       0       0       0       0       0
6178          UI       0       0       0       0       0       0       0       0       0       0
6179          UI       0       0       0       0       0       0       0       0       0       0
6180          UI       0       0       0       0       0       0       0       0       0       0
              *

6181          KK  DL44REDIVERT
6182          KM        Additional Retention based on 100yr 2hr retention.
6183          KM        C value is based on future land use, P=2.7, A=acres
6184          DT    RL44    47.3     0.0
6185          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6186          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6187          KK   CPL44COMBINE
6188          HC       3  22.802
              *

6189          KK  44DS14ROUTE
6190          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
6191          KM        model received on May 6, 2009 from PB,
6192          KM        Glendale to Drop Structure 14-RLP6-1
6193          RS       1    FLOW
6194          RC   0.035   0.015   0.035    2567  0.0038    0.00
6195          RX    0.00   10.00   13.00   25.00   50.00   62.00   82.00   83.80
6196          RY  1109.0 1109.00 1108.00 1102.00 1102.00 1108.00 1108.40 1109.00
              *

6197          KK  DS1449ROUTE
6198          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
6199          KM        model received on May 6, 2009 from PB,
6200          KM        Drop Structure 14 to Bethany Home Rd-RLP6-2
6201          RS       1    FLOW
6202          RC   0.035   0.015   0.035    2480  0.0041    0.00
6203          RX    0.00   10.00   13.00   25.00   50.00   62.00   82.00   83.80
6204          RY  1097.0 1097.00 1096.00 1090.00 1090.00 1096.00 1096.40 1097.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6205          KK     L40BASIN
6206          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
6207          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
6208          BA   0.610
6209          LG    0.25    0.25    4.25    0.49      25
6210          UI       0      82     287     450     615     970     785     578     417     219
6211          UI     136      83      30      26      25       0       0       0       0       0
6212          UI       0       0       0       0       0       0       0       0       0       0
6213          UI       0       0       0       0       0       0       0       0       0       0
6214          UI       0       0       0       0       0       0       0       0       0       0
              *

6215          KK  DL40REDIVERT
6216          KM        Additional Retention based on 100yr 2hr retention.
6217          KM        C value is based on future land use, P=2.7, A=acres
6218          DT    RL40    41.9     0.0
6219          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6220          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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                *
6221            KK  L40L45ROUTE
6222            KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
6223            KM        aerial / Manning's N Value: earth w/ sparse trees and brush
6224            RS      15    FLOW
6225            RC   0.032   0.032   0.032    5706  0.0053    0.00
6226            RX  100.00  120.00  128.00  136.00  144.00  152.00  164.00  220.00
6227            RY  1166.5 1166.00 1164.00 1162.00 1161.90 1164.00 1166.00 1166.50
                *

6228            KK     L45BASIN
6229            KM        BASIN BOUNDARY FROM BEARDSLEY CSR
6230            KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
6231            BA   0.503
6232            LG    0.25    0.25    4.45    0.43      24
6233            UI       0      81     330     489     762     854     572     390     185     109
6234            UI      55      25      24       0       0       0       0       0       0       0
6235            UI       0       0       0       0       0       0       0       0       0       0
6236            UI       0       0       0       0       0       0       0       0       0       0
6237            UI       0       0       0       0       0       0       0       0       0       0
                *

6238            KK  DL45REDIVERT
6239            KM        Additional Retention based on 100yr 2hr retention.
6240            KM        C value is based on future land use, P=2.7, A=acres
6241            DT    RL45    34.4     0.0
6242            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6243            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6244            KK   CPL45COMBINE
6245            HC       2   1.113
                *

6246            KK  L45L46ROUTE
6247            KM        Cross-section: Estimated 2' deep; width and side slopes estimated from a
6248            KM        road / Manning's N Value: clean earth; straight
6249            RS       2    FLOW
6250            RC   0.022   0.022   0.013    2613  0.0023    0.00
6251            RX  100.00  101.00  375.00  380.00  382.00  384.00  389.00  405.00
6252            RY  1143.0 1142.40 1142.00 1140.00 1139.90 1141.00 1142.20 1142.95
                *

6253            KK     L46BASIN
6254            KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6255            BA   0.490
6256            LG    0.30    0.25    4.15    0.44       5
6257            UI       0      68     240     375     516     808     624     453     319     155
6258            UI     102      62      21      20      21       0       0       0       0       0
6259            UI       0       0       0       0       0       0       0       0       0       0
6260            UI       0       0       0       0       0       0       0       0       0       0
6261            UI       0       0       0       0       0       0       0       0       0       0
                *

6262            KK  DL41SERETRIEVE
6263            DR   DL41S
                *

6264            KK  L41L46ROUTE
6265            KM        Cross-section: Cross section estimated from aerial; road
6266            KM        Manning's N Value: street and ROW
6267            RS       4    FLOW
6268            RC   0.032   0.016   0.032    6496  0.0049    0.00
6269            RX  100.00  140.00  142.00  152.00  162.00  164.00  174.00  190.00
6270            RY  1167.0 1166.00 1165.50 1165.70 1165.50 1166.00 1166.50 1167.00
                *

6271            KK   CPL46COMBINE
6272            HC       3   1.852
                *

6273            KK   DL461DIVERT
6274            KM        Bethany Home at 183rd split flow
6275            DT  DL461S     0.0     0.0
6276            DI     0.0   202.4   580.6  1312.2  2324.9     0.0     0.0     0.0     0.0     0.0
6277            DQ     0.0   102.5   110.7   124.7   147.0     0.0     0.0     0.0     0.0     0.0
                *

6278            KK   DL462DIVERT
6279            KM        Bethany Home at 183rd split flow
6280            DT  DL462S     0.0     0.0
6281            DI     0.0   100.0   469.8  1187.5  2178.0     0.0     0.0     0.0     0.0     0.0
6282            DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6283            KK  L46L47ROUTE
6284            KM        Cross-section: Cross section estimated from aerial; road
6285            KM        Manning's N Value: clean earth; straight; street ROB
6286            RS       1    FLOW
6287            RC   0.022   0.022   0.013    2652  0.0053    0.00
6288            RX  100.00  101.00  250.00  262.00  277.00  289.00  305.00  335.00
6289            RY  1138.9 1138.30 1138.00 1136.00 1136.10 1138.00 1138.40 1138.90
                *

6290            KK     L47BASIN
6291            KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6292            BA   0.497
6293            LG    0.30    0.25    4.10    0.46       5
6294            UI       0      60     168     303     388     559     705     522     402     294
6295            UI     169     102      69      40      18      19      18       0       0       0
6296            UI       0       0       0       0       0       0       0       0       0       0
6297            UI       0       0       0       0       0       0       0       0       0       0
6298            UI       0       0       0       0       0       0       0       0       0       0
                *

6299            KK  DL47REDIVERT
6300            KM        Additional Retention based on 100yr 2hr retention.
6301            KM        C value is based on future land use, P=2.7, A=acres
6302            DT    RL47     7.8     0.0
6303            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6304            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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                *
6305            KK   DL421RETRIEVE
6306            DR  DL421S
                *

6307            KK  L42L47ROUTE
6308            KM        Cross-section: Cross section estimated from 1992 survey
6309            KM        Manning's N Value: clean earth; straight; street LOB
6310            RS       2    FLOW
6311            RC   0.016   0.022   0.016    5287  0.0057    0.00
6312            RX  100.00  112.00  116.00  120.00  125.00  129.00  133.00  150.00
6313            RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1146.00
                *

6314            KK   CPL47COMBINE
6315            HC       3   3.089
                *

6316            KK   DL471DIVERT
6317            KM        Bethany Home at Citrus split flow
6318            DT  DL471S     0.0     0.0
6319            DI     0.0   379.8  1603.8  3817.4  6818.0     0.0     0.0     0.0     0.0     0.0
6320            DQ     0.0   185.0   185.0   185.0   185.0     0.0     0.0     0.0     0.0     0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6321            KK   DL472DIVERT
6322            KM        Bethany Home at Citrus split flow
6323            DT  DL472S     0.0     0.0
6324            DI     0.0   194.8  1418.8  3632.4  6633.0     0.0     0.0     0.0     0.0     0.0
6325            DQ     0.0   179.6  1195.7  2776.3  4806.5     0.0     0.0     0.0     0.0     0.0
                *

6326            KK  L47L48ROUTE
6327            KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6328            KM        aerial / Manning's N Value: earth w/ sparse trees and brush
6329            RS       4    FLOW
6330            RC   0.032   0.032   0.013    5306  0.0045    0.00
6331            RX  100.00  140.00  160.00  168.00  174.00  182.00  194.00  206.00
6332            RY  1124.5 1124.25 1124.00 1122.00 1122.10 1124.00 1124.25 1124.50
                *

6333            KK     L48BASIN
6334            KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6335            BA   1.003
6336            LG    0.28    0.25    4.10    0.48      12
6337            UI       0     134     450     731     976    1574    1300     961     702     386
6338            UI     227     142      61      41      42       0       0       0       0       0
6339            UI       0       0       0       0       0       0       0       0       0       0
6340            UI       0       0       0       0       0       0       0       0       0       0
6341            UI       0       0       0       0       0       0       0       0       0       0
                *

6342            KK  DL48REDIVERT
6343            KM        Additional Retention based on 100yr 2hr retention.
6344            KM        C value is based on future land use, P=2.7, A=acres
6345            DT    RL48    27.4     0.0
6346            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6347            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

6348            KK   DL422RETRIEVE
6349            DR  DL422S
                *

6350            KK  L42L48ROUTE
6351            KM        Cross-section: Cross section estimated from 1992 survey
6352            KM        Manning's N Value: clean earth; straight;
6353            RS       7    FLOW
6354            RC   0.022   0.022   0.022   10523  0.0030    0.00
6355            RX  100.00  125.00  130.00  135.00  138.00  143.00  148.00  168.00
6356            RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1145.00
                *

6357            KK   DL431RETRIEVE
6358            DR  DL431S
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6359            KK  L43L48ROUTE
6360            KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6361            KM        aerial / Manning's N Value: clean earth; straight, street LOB
6362            RS       9    FLOW
6363            RC   0.022   0.022   0.016    5357  0.0045    0.00
6364            RX  100.00  120.00  128.00  136.00  142.00  150.00  170.00  190.00
6365            RY  1120.5 1120.30 1120.00 1118.00 1118.10 1120.00 1120.30 1120.50
                *

6366            KK   CPL48COMBINE
6367            HC       4   5.089
                *

6368            KK   DL481DIVERT
6369            KM        Bethany Home at Cotton split flow
6370            DT  DL481S     0.0     0.0
6371            DI     0.0   398.6  1307.1  2640.8  4556.3     0.0     0.0     0.0     0.0     0.0
6372            DQ     0.0     0.0    16.8    73.0   287.0     0.0     0.0     0.0     0.0     0.0
                *

6373            KK   DL482DIVERT
6374            KM        Bethany Home at Cotton split flow
6375            DT  DL482S     0.0     0.0
6376            DI     0.0   398.6  1290.3  2567.8  4269.2     0.0     0.0     0.0     0.0     0.0
6377            DQ     0.0     3.2    21.1    47.3    79.8     0.0     0.0     0.0     0.0     0.0
                *

6378            KK  L48L49ROUTE
6379            KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6380            KM        aerial / Manning's N Value: clean earth; straight; street ROB
6381            RS       3    FLOW
6382            RC   0.022   0.022   0.013    2488  0.0040    0.00
6383            RX  100.00  101.00  540.00  548.00  550.00  558.00  566.00  576.00
6384            RY  1102.7 1102.30 1102.00 1100.00 1100.10 1102.00 1102.25 1102.65
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                *
6385            KK     L49BASIN
6386            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
6387            KM        AG LAND, EASTERN BOUNDARY LOOP 303
6388            BA   0.473
6389            LG    0.10     0.25     4.10     0.65       81
6390            UI       0      176      557      996      964      565      228      107       32       32
6391            UI       0        0        0        0        0        0        0        0        0        0
6392            UI       0        0        0        0        0        0        0        0        0        0
6393            UI       0        0        0        0        0        0        0        0        0        0
6394            UI       0        0        0        0        0        0        0        0        0        0
                *

6395            KK  DL49REDIVERT
6396            KM        Additional Retention based on 100yr 2hr retention.
6397            KM        C value is based on future land use, P=2.7, A=acres
6398            DT    RL49     49.5      0.0
6399            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6400            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6401            KK   DL432RETRIEVE
6402            DR  DL432S
                *

6403            KK  L43L49ROUTE
6404            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6405            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6406            RS      11     FLOW
6407            RC   0.035    0.035    0.035     5833   0.0060     0.00
6408            RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
6409            RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
                *

6410            KK   CPL49COMBINE
6411            HC       4  26.378
                *

6412            KK  49DS15ROUTE
6413            KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
6414            KM        model received on May 6, 2009 from PB,
6415            KM        Bethany Home to Drop Structure 15-RLP7-1
6416            RS       2     FLOW
6417            RC   0.035    0.015    0.035     1899   0.0043     0.00
6418            RX    0.00    10.00    13.00    25.00    57.00    69.00    89.00    90.80
6419            RY  1087.0  1087.00  1086.00  1080.00  1080.00  1086.00  1086.40   197.00
                *

6420            KK  DS1554ROUTE
6421            KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
6422            KM        model received on May 6, 2009 from PB,
6423            KM        Drop Structure 15 to Camelback Road-RLP7-2
6424            RS       1     FLOW
6425            RC   0.035    0.015    0.035     3152   0.0033     0.00
6426            RX    0.00    10.00    13.00    25.00    57.00    69.00    89.00    90.80
6427            RY  1077.0  1077.00  1076.00  1070.00  1070.00  1076.00  1076.40  1077.00
                *

6428            KK     L54BASIN
6429            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
6430            KM        AND EASTERN BOUNDARY LOOP 303
6431            BA   0.479
6432            LG    0.09     0.24     4.65     0.45       76
6433            UI       0      183      587     1055      957      556      212       93       33       33
6434            UI       0        0        0        0        0        0        0        0        0        0
6435            UI       0        0        0        0        0        0        0        0        0        0
6436            UI       0        0        0        0        0        0        0        0        0        0
6437            UI       0        0        0        0        0        0        0        0        0        0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6438            KK  DL54REDIVERT
6439            KM        Additional Retention based on 100yr 2hr retention.
6440            KM        C value is based on future land use, P=2.7, A=acres
6441            DT    RL54     47.6      0.0
6442            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6443            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

6444            KK   DL482RETRIEVE
6445            DR  DL482S
                *

6446            KK  L48L54ROUTE
6447            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6448            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6449            RS      14     FLOW
6450            RC   0.035    0.035    0.035     5864   0.0056     0.00
6451            RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
6452            RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
                *

6453            KK   CPL54COMBINE
6454            HC       3  26.857
                *

6455            KK  L54W2EROUTE
6456            KM        Cross-section: Cross-section determined from
6457            KM        Camelback CAR model REC-EWP.OUT
6458            KM        dated July 14, 2008, DIAG
6459            RS       1     FLOW
6460            RC   0.020    0.020    0.020     1400   0.0057     0.00
6461            RX  1000.0  1010.00  1035.00  1036.00  1076.00  1077.00  1082.00  1092.00
6462            RY  1069.0  1069.00  1069.00  1065.00  1065.00  1069.00  1069.00  1069.00
                *

6463            KK  W2EB46ROUTE
6464            KM        Cross-section: Cross-section determined from
6465            KM        Camelback CAR model REC-EWP.OUT
6466            KM        dated July 14, 2008, -R237
6467            RS       1     FLOW
6468            RC   0.032    0.032    0.032     2640   0.0039     0.00
```

```
6469          RX  100.00  124.00  125.00  126.00  145.00  146.00  147.00  171.00
6470          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

6471          KK     B46BASIN
6472          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
6473          KM        PHOTOGRAPHY OF AG LAND AND 1990 TOPO
6474          BA   0.542
6475          LG    0.10    0.25    4.80    0.42      78
6476          UI       0     190     616    1083    1123     676     284     138      38      36
6477          UI       0       0       0       0       0       0       0       0       0       0
6478          UI       0       0       0       0       0       0       0       0       0       0
6479          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE164

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

6480          UI       0       0       0       0       0       0       0       0       0       0
              *

6481          KK  DB46REDIVERT
6482          KM        Additional Retention based on 100yr 2hr retention.
6483          KM        C value is based on future land use, P=2.7, A=acres
6484          DT    RB46    54.5     0.0
6485          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6486          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6487          KK   DB441RETRIEVE
6488          DR  DB441S
              *

6489          KK  B44B46ROUTE
6490          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6491          KM        Manning's N Value: clean straight earth
6492          RS       4    FLOW
6493          RC   0.022   0.022   0.022    5267  0.0038    0.00
6494          RX  100.00  123.00  136.00  139.00  143.00  147.00  157.00  167.00
6495          RY  1072.5 1072.30 1072.00 1070.00 1070.10 1072.00 1072.30 1072.50
              *

6496          KK   CPB46COMBINE
6497          HC       3   28.69
              *

6498          KK  B46B47ROUTE
6499          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6500          KM        Manning's N Value: earth w/ sparse trees and brush, road right bank
6501          RS       1    FLOW
6502          RC   0.032   0.032   0.032    1680  0.0015    0.00
6503          RX  100.00  124.00  125.00  126.00  167.00  168.00  169.00  193.00
6504          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

6505          KK     B47BASIN
6506          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
6507          BA   0.496
6508          LG    0.11    0.25    4.90    0.40      70
6509          UI       0     168     540     944    1047     632     284     133      43      32
6510          UI       0       0       0       0       0       0       0       0       0       0
6511          UI       0       0       0       0       0       0       0       0       0       0
6512          UI       0       0       0       0       0       0       0       0       0       0
6513          UI       0       0       0       0       0       0       0       0       0       0
              *

6514          KK  DB47REDIVERT
6515          KM        Additional Retention based on 100yr 2hr retention.
6516          KM        C value is based on future land use, P=2.7, A=acres
6517          DT    RB47    47.9     0.0
6518          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6519          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE165

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

6520          KK   DB442RETRIEVE
6521          DR  DB442S
              *

6522          KK  B44B47ROUTE
6523          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6524          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6525          RS      10    FLOW
6526          RC   0.035   0.035   0.035    5832  0.0045    0.00
6527          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6528          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6529          KK   CPB47COMBINE
6530          HC       4  31.946
              *

6531          KK     B48BASIN
6532          KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
6533          BA   0.397
6534          LG    0.10    0.25    4.70    0.44      77
6535          UI       0     189     584    1035     719     344     129      39      30       0
6536          UI       0       0       0       0       0       0       0       0       0       0
6537          UI       0       0       0       0       0       0       0       0       0       0
6538          UI       0       0       0       0       0       0       0       0       0       0
6539          UI       0       0       0       0       0       0       0       0       0       0
              *

6540          KK  DB48REDIVERT
6541          KM        Additional Retention based on 100yr 2hr retention.
6542          KM        C value is based on future land use, P=2.7, A=acres
6543          DT    RB48    42.0     0.0
6544          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6545          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6546          KK   CPB48COMBINE
6547          HC       2  32.343
              *

6548          KK   SRB48STORAGE
6549          KM        STORAGE THROUGH REEMS ROAD BASIN-DB252,
6550          KM        REC-EWP.OUT MODEL, JULY 14, 2008
```

```
6551          KO
6552          RS       1    STOR
6553          SV           23.90   68.50  109.80
6554          SQ          409.00  817.00 1156.00
6555          SE  1041.0 1043.00 1045.00 1047.00
6556          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6557          KK  B48B54ROUTE
6558          KM        Cross-section: Cross-section determined from
6559          KM        Camelback CAR model REC-EWP.OUT
6560          KM        dated July 14, 2008, ~R240
6561          RS       4    FLOW
6562          RC   0.032   0.032   0.032    4128  0.0004    0.00
6563          RX  100.00  124.00  125.00  126.00  166.00  167.00  168.00  192.00
6564          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

6565          KK     B42BASIN
6566          KM        BASIN BOUNDARY FROM LUKE AFB
6567          BA   0.348
6568          LG    0.15    0.25    4.80    0.40      29
6569          UI       0     431    1308     743     166      42       0       0       0       0
6570          UI       0       0       0       0       0       0       0       0       0       0
6571          UI       0       0       0       0       0       0       0       0       0       0
6572          UI       0       0       0       0       0       0       0       0       0       0
6573          UI       0       0       0       0       0       0       0       0       0       0
              *

6574          KK  DB42REDIVERT
6575          KM        Additional Retention based on 100yr 2hr retention.
6576          KM        C value is based on future land use, P=2.7, A=acres
6577          DT    RB42     1.2     0.0
6578          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6579          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6580          KK  B42B53ROUTE
6581          KM        Cross-section: Cross section estimated from aerial & topo
6582          KM        Manning's N Value: earth w/ sparse trees and brush
6583          RS      30    FLOW
6584          RC   0.032   0.032   0.032   17837  0.0009    0.00
6585          RX  100.00  140.00  180.00  220.00  240.00  280.00  300.00  320.00
6586          RY  1070.5 1070.30 1070.00 1068.00 1068.10 1070.00 1072.00 1074.00
              *

6587          KK     B53BASIN
6588          KM        BASIN BOUNDARY FROM LUKE AFB
6589          BA   1.101
6590          LG    0.15    0.25    4.80    0.40      32
6591          UI       0      94     136     354     472     575     684     925    1181     935
6592          UI     766     631     508     404     239     163     140      95      66      29
6593          UI      29      29      28      29       0       0       0       0       0       0
6594          UI       0       0       0       0       0       0       0       0       0       0
6595          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6596          KK  DB53REDIVERT
6597          KM        Additional Retention based on 100yr 2hr retention.
6598          KM        C value is based on future land use, P=2.7, A=acres
6599          DT    RB53    23.2     0.0
6600          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6601          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6602          KK   CPB53COMBINE
6603          HC       2   1.449
              *

6604          KK  B53B54ROUTE
6605          KM        Cross-section: Cross-section determined from aerial and 1991 topo
6606          KM        Manning's N Value: earth w/ sparse trees and brush
6607          RS       3    FLOW
6608          RC   0.032   0.032   0.032    3082  0.0042    0.00
6609          RX  100.00  200.00  365.00  540.00  785.00  940.00 1050.00 1130.00
6610          RY  1056.5 1056.30 1056.00 1054.00 1054.10 1056.00 1056.30 1056.50
              *

6611          KK     B49BASIN
6612          KM        BASIN BOUNDARY FROM LUKE AFB
6613          BA   0.323
6614          LG    0.15    0.25    4.70    0.42      29
6615          UI       0     513    1378     507      81       0       0       0       0       0
6616          UI       0       0       0       0       0       0       0       0       0       0
6617          UI       0       0       0       0       0       0       0       0       0       0
6618          UI       0       0       0       0       0       0       0       0       0       0
6619          UI       0       0       0       0       0       0       0       0       0       0
              *

6620          KK  B49B50ROUTE
6621          KM        Cross-section: Cross-section estimated from aerial and topo-road
6622          KM        Manning's N Value: street, parking lot
6623          RS       4    FLOW
6624          RC   0.016   0.016   0.016    6292  0.0016    0.00
6625          RX  100.00  120.00  140.00  142.00  272.00  274.00  294.00  314.00
6626          RY  1075.0 1074.50 1074.00 1073.50 1073.50 1074.00 1074.50 1075.00
              *

6627          KK     B50BASIN
6628          KM        BASIN BOUNDARY FROM LUKE AFB
6629          BA   0.707
6630          LG    0.15    0.25    5.40    0.30      29
6631          UI       0     378    1137    1952    1219     506     184      56       0       0
6632          UI       0       0       0       0       0       0       0       0       0       0
6633          UI       0       0       0       0       0       0       0       0       0       0
6634          UI       0       0       0       0       0       0       0       0       0       0
6635          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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6636          KK  LR02SDRETRIEVE
6637          DR  LR02LR
              *

6638          KK  B02B50ROUTE
6639          KM        Cross-section: From Litchfield Rd to Bullard Wash Trib outlet thru LAFB
6640          KM        route taken at roadway and parking lots north and south of
6641          KM        roadway per aerial and topo
6642          RS       1    FLOW
6643          RC   0.016   0.016   0.016    4817  0.0016    0.00
6644          RX  100.00  120.00  140.00  142.00  272.00  274.00  294.00  314.00
6645          RY  1075.0 1074.50 1074.00 1073.50 1073.40 1074.00 1074.50 1075.00
              *

6646          KK   CPB50COMBINE
6647          HC       3   1.888
              *

6648          KK  B50B51ROUTE
6649          KM        Cross-section: Luke AFB CAR by HDR dated October 2004,
6650          KM        FCD Contract No 2003C018
6651          RS       1    FLOW
6652          RC   0.013   0.013   0.013    1068  0.0013    0.00
6653          RX  100.00  102.00  106.00  110.00  120.00  124.00  128.00  130.00
6654          RY  1070.0 1069.00 1067.00 1065.00 1064.90 1067.00 1069.00 1070.00
              *

6655          KK     B51BASIN
6656          KM        BASIN BOUNDARY FROM LUKE AFB
6657          BA   0.609
6658          LG    0.15    0.25    5.40    0.30      29
6659          UI       0     309     944    1640    1078     471     182      47       0       0
6660          UI       0       0       0       0       0       0       0       0       0       0
6661          UI       0       0       0       0       0       0       0       0       0       0
6662          UI       0       0       0       0       0       0       0       0       0       0
6663          UI       0       0       0       0       0       0       0       0       0       0
              *

6664          KK   CPB51COMBINE
6665          HC       2   2.497
              *

6666          KK  B51B52ROUTE
6667          KM        Cross-section: Luke AFB CAR by HDR
6668          KM        dated October 2004,
6669          KM        FCD Contract No 2003C018
6670          RS       2    FLOW
6671          RC   0.030   0.030   0.030    5441  0.0031    0.00
6672          RX  100.00  108.00  116.00  124.00  164.00  172.00  180.00  188.00
6673          RY  1064.0 1062.00 1060.00 1058.00 1057.90 1060.00 1062.00 1064.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6674          KK     B52BASIN
6675          KM        BASIN BOUNDARY FROM LUKE AFB
6676          BA   0.842
6677          LG    0.12    0.25    5.30    0.33      56
6678          UI       0     345    1073    1973    1630     923     337     134      59       0
6679          UI       0       0       0       0       0       0       0       0       0       0
6680          UI       0       0       0       0       0       0       0       0       0       0
6681          UI       0       0       0       0       0       0       0       0       0       0
6682          UI       0       0       0       0       0       0       0       0       0       0
              *

6683          KK  DB52REDIVERT
6684          KM        Additional Retention based on 100yr 2hr retention.
6685          KM        C value is based on future land use, P=2.7, A=acres
6686          DT    RB52    73.3     0.0
6687          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6688          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6689          KK   CPB52COMBINE
6690          HC       2   3.339
              *

6691          KK  B52B54ROUTE
6692          KM        Cross-section: Cross-section determined from aerial and 1991 topo
6693          KM        Manning's N Value: earth w/ sparse trees and brush
6694          RS       3    FLOW
6695          RC   0.032   0.032   0.032    3082  0.0042    0.00
6696          RX  100.00  200.00  365.00  540.00  785.00  940.00 1050.00 1130.00
6697          RY  1056.5 1056.30 1056.00 1054.00 1054.10 1056.00 1056.30 1056.50
              *

6698          KK     B54BASIN
6699          KM        BASIN BOUNDARY FROM FR CAL FACLON GOLF, ARIZONA MOTORSPORTS PARK,
6700          KM        LAFB BOUNDARY AND CAMELBACK CHANNEL
6701          BA   1.228
6702          LG    0.12    0.25    4.65    0.46      44
6703          UI       0     392    1282    2168    2649    1599     795     350     136      78
6704          UI       0       0       0       0       0       0       0       0       0       0
6705          UI       0       0       0       0       0       0       0       0       0       0
6706          UI       0       0       0       0       0       0       0       0       0       0
6707          UI       0       0       0       0       0       0       0       0       0       0
              *

6708          KK  DB54REDIVERT
6709          KM        Retention volume estimated based on aerial
6710          DT    RB54    92.8     0.0
6711          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6712          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
```



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

6713          KK   CPB54COMBINE
6714          KM        Bullard Wash at Camelback Road
6715          HC       4  38.359
              *

6716          KK  B54B57ROUTE
6717          KM        Geometry from Bullard Wash L33PE4H9.OUT,
6718          KM        4/18/07 by WoodPatel provided by FCDMC
```

```
6719          RS        3    FLOW
6720          RC    0.030    0.030    0.030     5603   0.0020     0.00
6721          RX     0.00    48.90    61.90    74.90    87.90   100.90   113.90   162.70
6722          RY   1047.6 1039.50 1039.50 1039.50 1039.50 1039.50 1039.80 1047.60
              *

6723          KK     B55BASIN
6724          KM        BASIN BOUNDARY FROM 1990 TOPO
6725          BA    0.530
6726          LG     0.10     0.25     4.80     0.43       80
6727          UI        0      186      602     1059     1098      661      279      134       37       35
6728          UI        0        0        0        0        0        0        0        0        0        0
6729          UI        0        0        0        0        0        0        0        0        0        0
6730          UI        0        0        0        0        0        0        0        0        0        0
6731          UI        0        0        0        0        0        0        0        0        0        0
              *

6732          KK  DB55REDIVERT
6733          KM        Additional Retention based on 100yr 6hr retention.
6734          KM        C value is based on future land use, P=3.2, A=acres
6735          DT    RB55     65.8      0.0
6736          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6737          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6738          KK  B55B56ROUTE
6739          KM        Cross-section: assumed 3' depth, 4:1 sideslope, width based on
6740          KM        aerial / Manning's N Value: clean earth; straight
6741          RS       13    FLOW
6742          RC    0.022    0.022    0.022     7006   0.0027     0.00
6743          RX   100.00   102.00   104.00   124.00   154.00   174.00   194.00   214.00
6744          RY   1037.0 1036.25 1036.00 1033.00 1033.10 1036.00 1036.25 1037.00
              *

6745          KK     B56BASIN
6746          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5
6747          BA    1.136
6748          LG     0.19     0.25     4.70     0.40       47
6749          UI        0       82       83      252      360      444      505      599      749     1023
6750          UI      917      758      646      538      458      377      268      159      138      117
6751          UI       83       70       25       26       25       25       25       26        0        0
6752          UI        0        0        0        0        0        0        0        0        0        0
6753          UI        0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6754          KK  DB56REDIVERT
6755          KM        Retention volume estimated based on aerial
6756          DT    RB56    108.7      0.0
6757          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6758          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6759          KK   CPB56COMBINE
6760          HC       2    1.666
              *

6761          KK  B56B57ROUTE
6762          KM        Cross-section: Cross-section determined
6763          KM        from Camelback CAR model REC-EWP.OUT
6764          KM        dated July 14, 2008, ~R238
6765          RS        5    FLOW
6766          RC    0.032    0.032    0.032     1680   0.0015     0.00
6767          RX   100.00   124.00   125.00   126.00   167.00   168.00   169.00   193.00
6768          RY    18.00    10.00    10.00    10.00    10.00    10.00    10.00    18.00
              *

6769          KK     B57BASIN
6770          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5 AND 1990 TOPO
6771          BA    1.119
6772          LG     0.24     0.24     5.10     0.33       21
6773          UI        0      156      564      877     1214     1887     1397     1021      710      332
6774          UI      219      128       48       48       48        0        0        0        0        0
6775          UI        0        0        0        0        0        0        0        0        0        0
6776          UI        0        0        0        0        0        0        0        0        0        0
6777          UI        0        0        0        0        0        0        0        0        0        0
              *

6778          KK  DB57REDIVERT
6779          KM        Retention volume estimated based on aerial
6780          DT    RB57     80.8      0.0
6781          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6782          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6783          KK   CPB57COMBINE
6784          HC       3   41.144
              *

6785          KK  B57B58ROUTE
6786          KM        Geometry from Bullard Wash L33PE4H9.OUT,
6787          KM        4/18/07 by WoodPatel provided by FCDMC
6788          RS        3    FLOW
6789          RC    0.030    0.030    0.030     5318   0.0027     0.00
6790          RX     0.00    70.00    83.00    96.00   109.00   122.00   135.00   205.00
6791          RY   1022.8 1015.80 1015.70 1015.60 1015.70 1015.80 1015.90 1022.80
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6792          KK     B58BASIN
6793          KM        BASIN BOUNDARY FROM PEBBLE CREEK PHASE 1
6794          BA    1.197
6795          LG     0.21     0.25     5.60     0.28       27
6796          UI        0      154      491      816     1072     1678     1637     1197      874      583
6797          UI      275      203      119       48       48       47        0        0        0        0
6798          UI        0        0        0        0        0        0        0        0        0        0
6799          UI        0        0        0        0        0        0        0        0        0        0
6800          UI        0        0        0        0        0        0        0        0        0        0
              *

6801          KK  DB58REDIVERT
6802          KM        Pebblecreek Development Phase I - West Half Drainage
6803          KM        Report, Pebblecreek Development Phase I - East Half Drainage Report
6804          DT    RB58     55.4      0.0
```

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6805          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6806          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6807          KK   CPB58COMBINE
6808          HC       2  42.341
              *

6809          KK  B58B59ROUTE
6810          KM        Geometry from Bullard Wash L33PE4H9.OUT,
6811          KM        4/18/07 by WoodPatel provided by FCDMC
6812          RS       3    FLOW
6813          RC   0.030   0.030   0.030    6454  0.0048    0.00
6814          RX    0.00    0.00   18.40   36.70   55.10   73.40   97.80   91.80
6815          RY  1013.1 1005.70 1005.60 1005.50 1005.60 1005.70 1005.80 1013.10
              *

6816          KK     B59BASIN
6817          KM        BASIN BOUNDARY FROM PUEBLO VERDE, ESTRELLA FALLS, AND RIO PASEO
6818          BA   0.699
6819          LG    0.16    0.25    5.80    0.25      56
6820          UI       0     117     475     697    1129    1166     785     515     235     142
6821          UI      65      34      34       0       0       0       0       0       0       0
6822          UI       0       0       0       0       0       0       0       0       0       0
6823          UI       0       0       0       0       0       0       0       0       0       0
6824          UI       0       0       0       0       0       0       0       0       0       0
              *

6825          KK  DB59REDIVERT
6826          KM        Final Drainage Report for Rio Paseo Parcel 8, Drainage Report for
6827          KM        Parcels 9, 10, & 11 of Goodyear Planned Regional Center
6828          KM        (60% retention used)
6829          DT    RB59    65.9     0.0
6830          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6831          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6832          KK   CPB59COMBINE
6833          HC       2   43.04
              *

6834          KK     B64BASIN
6835          KM        BASIN BOUNDARY FROM GOODYEAR PLANNED RC AND ALEXAN ESTRELLA FALLS
6836          BA   0.229
6837          LG    0.17    0.25    4.80    0.38      64
6838          UI       0      75     248     429     485     294     135      62      22      14
6839          UI       0       0       0       0       0       0       0       0       0       0
6840          UI       0       0       0       0       0       0       0       0       0       0
6841          UI       0       0       0       0       0       0       0       0       0       0
6842          UI       0       0       0       0       0       0       0       0       0       0
              *

6843          KK  DB64REDIVERT
6844          KM        Drainage Report for Parcels 9, 10, & 11 of Goodyear Planned
6845          KM        Regional Center (40% retention used)
6846          DT    RB64    23.1     0.0
6847          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6848          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6849          KK  B64B65ROUTE
6850          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6851          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6852          RS       8    FLOW
6853          RC   0.035   0.035   0.035    3124  0.0032    0.00
6854          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6855          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6856          KK  DB65REDIVERT
6857          KM        Additional Retention based on 100yr 6hr retention.
6858          KM        C value is based on future land use, P=3.2, A=acres
6859          DT    RB65    23.4     0.0
6860          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6861          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6862          KK     B65BASIN
6863          KM        BASIN BOUNDARY FROM 1990 TOPO AND GOODYEAR CENTERPOINTE
6864          BA   0.234
6865          LG    0.10    0.25    5.10    0.36      80
6866          UI       0     689     993     115       0       0       0       0       0       0
6867          UI       0       0       0       0       0       0       0       0       0       0
6868          UI       0       0       0       0       0       0       0       0       0       0
6869          UI       0       0       0       0       0       0       0       0       0       0
6870          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6871          KK    DB65DIVERT
6872          KM        Bullard Wash divert half of B65 to west. From Model
6873          KM        L33PE4H0.OUT modified by Wood Patel on April 18, 2007
6874          DT    DB65     0.0     0.0
6875          DI     0.0   500.0  1000.0  5000.0  1000.0     0.0     0.0     0.0     0.0     0.0
6876          DQ     0.0   250.0   500.0   250.0  5000.0     0.0     0.0     0.0     0.0     0.0
              *

6877          KK  CPB65ACOMBINE
6878          HC       3  43.503
              *

6879          KK  DB65BNDIVERT
6880          KM        DIVERT BASIN AT I-10 AND BULLARD WASH-DBD1S
6881          KM        PER BULLARD WASH BASIN HEC-1 L33PE4H9.OUT
6882          KM        DATED APRIL 18, 2007 BY WOOD PATEL
6883          DT   DB65E     0.0     0.0
6884          DI     0.0  1000.0  1370.0  1900.0  2500.0  3000.0  3611.0  4000.0     0.0     0.0
6885          DQ     0.0     0.0     0.0   268.0   717.0  1114.0  1608.0  1899.0     0.0     0.0
              *

6886          KK  B6565BROUTE
6887          KM        Cross-section: Bullard Wash Basin HEC-1 L33PE4H9.OUT
6888          KM        dated April 18, 2007 by Wood Patel, RBD1S
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6889          RS       1    FLOW
6890          RC   0.030   0:030   0.030    1254  0.0026    0.00
6891          RX    0.00   34.20   53.20   72.20   91.20  110.20  129.20  163.40
6892          RY  990.70  985.00  985.00  985.00  985.00  985.00  985.00  990.70
              *

6893          KK     B61BASIN
6894          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
6895          KM        BY DEL RIO ENG (2006)
6896          BA   0.963
6897          LG    0.20    0.25    4.80    0.39      27
6898          UI       0      90     159     364     476     591     729    1076     979     764
6899          UI     621     495     380     211     153     117      90      37      27      27
6900          UI      28      28       0       0       0       0       0       0       0       0
6901          UI       0       0       0       0       0       0       0       0       0       0
6902          UI       0       0       0       0       0       0       0       0       0       0
              *

6903          KK  DB61REDIVERT
6904          KM        Pebblecreek Phase II Master Drainage Report (east half)
6905          DT    RB61    68.2     0.0
6906          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6907          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6908          KK  B61B62ROUTE
6909          KM        Cross-section: assumed ROW V-Ditch, 4:1 sideslopes
6910          KM        width based on aerial / Manning's N Value: clean earth;
6911          KM        straight; street LOB
6912          RS      10    FLOW
6913          RC   0.016   0.022   0.022    4105  0.0010    0.00
6914          RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
6915          RY  1012.5 1012.30 1012.00 1009.00 1009.10 1012.00 1012.30 1012.50
              *

6916          KK     B62BASIN
6917          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT BY DEL RIO
6918          KM        ENG (2006), MODIFIED TO INCLUDE NE AREA CONTRIBUTES AT ROAD OVERTOPPING
6919          BA   0.428
6920          LG    0.27    0.27    4.80    0.34      22
6921          UI       0      45     107     208     270     345     505     509     388     297
6922          UI     230     151      79      64      46      17      14      14      14       0
6923          UI       0       0       0       0       0       0       0       0       0       0
6924          UI       0       0       0       0       0       0       0       0       0       0
6925          UI       0       0       0       0       0       0       0       0       0       0
              *

6926          KK  DB62REDIVERT
6927          KM        Retention volume estimated based on aerial
6928          DT    RB62    27.8     0.0
6929          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6930          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6931          KK   CPB62COMBINE
6932          HC       2   1.391
              *

6933          KK  B62B63ROUTE
6934          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6935          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6936          RS       2    FLOW
6937          RC   0.035   0.035   0.035    1382  0.0058    0.00
6938          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6939          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6940          KK     B63BASIN
6941          KM        BASIN BOUNDARY FROM 1990 TOPO AND PEBBLE CREEK MARKETPLACE
6942          BA   0.124
6943          LG    0.10    0.24    4.80    0.40      83
6944          UI       0     225     551     157      24       0       0       0       0       0
6945          UI       0       0       0       0       0       0       0       0       0       0
6946          UI       0       0       0       0       0       0       0       0       0       0
6947          UI       0       0       0       0       0       0       0       0       0       0
6948          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6949          KK  DB63REDIVERT
6950          KM        Additional Retention based on 100yr 6hr retention.
6951          KM        C value is based on future land use, P=3.2, A=acres
6952          DT    RB63    13.9     0.0
6953          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6954          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6955          KK   CPB63COMBINE
6956          HC       2   1.515
              *

6957          KK   SRB63STORAGE
6958          KM        Basin at I-10
6959          KO
6960          RS       1    STOR
6961          SV            0.17    1.61    4.19
6962          SQ           82.00  694.00 1687.00
6963          SE  1002.8 1003.00 1003.50 1004.00
6964          ST
              *

6965          KK  B63B65ROUTE
6966          KM        Cross-section: Cross-section determined from aerial and
6967          KM        1991 topo / Manning's N Value: earth w/ sparse trees and brush
6968          RS       3    FLOW
6969          RC   0.032   0.032   0.032    2605  0.0054    0.00
6970          RX  100.00  104.00  108.00  122.00  123.00  137.00  140.00  145.00
6971          RY  998.50  998.30  998.00  995.00  995.10  998.00  999.00 1000.00
              *

6972          KK    DB65RETRIEVE
6973          DR    DB65
              *
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6974          KK  CPB65BCOMBINE
6975          HC       3  45.018
              *

6976          KK  B65B66ROUTE
6977          KM        Cross-section: Bullard Wash Basin HEC-1 L33PE4H9.OUT
6978          KM        dated April 18, 2007 by Wood Patel, RBD1S
6979          RS       3    FLOW
6980          RC   0.030   0.030   0.030    4400  0.0028    0.00
6981          RX    0.00   28.20   47.20   66.20   85.20  104.20  123.20  151.40
6982          RY  985.80  981.10  981.10  981.10  981.10  981.10  981.10  985.80
              *

6983          KK     S01BASIN
6984          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR ESTRELLA PARKWAY AND
6985          KM        1-10 DATED 8/26/04 BY KIMLEY HORN, FINAL DRAINAGE REPORT FOR PARKWAY
6986          KM        VILLAGE DATED 11/22/05 BY LANDFORM, FINAL DRAINAGE STATEMENT FOR
6987          KM        ESTRELLA SHOPS C DATED 6/5/07 BY CLC ASSOCIATES, BELLA
6988          BA   0.268
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6989          LG    0.15    0.25    4.80    0.39      66
6990          UI       0     144     430     740     463     191      70      21       0       0
6991          UI       0       0       0       0       0       0       0       0       0       0
6992          UI       0       0       0       0       0       0       0       0       0       0
6993          UI       0       0       0       0       0       0       0       0       0       0
6994          UI       0       0       0       0       0       0       0       0       0       0
              *

6995          KK  DS01REDIVERT
6996          KM        Final Drainage Report Estrella Parkway and I-10, Final Drainage Report f
6997          KM        Parkway Village, Final Drainage Report for Canyon Trails Plaza Phase II,
6998          KM        Final Drainage Statement for Estrella Shops C, Final Drainage Report fo
6999          KM        Safeway at NWC of Estrella Parkway and Van Buren, Bella Rosa Subdivision
7000          KM        Final Drainage Study, Final Drainage Report for Travis Park at Canyon Tr
7001          KM        Parcel 3M1 (portion of retention used), Drainage Report for Canyon Trail
7002          KM        Unit 3A (portion of retention used)
7003          DT    RS01    39.9     0.0
7004          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7005          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7006          KK   DS011DIVERT
7007          KM        Van Buren at Estrella split flow
7008          DT  DS011S     0.0     0.0
7009          DI     0.0   137.2   537.6  1491.9  2902.6     0.0     0.0     0.0     0.0     0.0
7010          DQ     0.0    75.1   298.1   885.3  1750.8     0.0     0.0     0.0     0.0     0.0
              *

7011          KK   DS012DIVERT
7012          KM        Van Buren at Estrella split flow
7013          DT  DS012S     0.0     0.0
7014          DI     0.0    62.0   239.4   606.6  1151.8     0.0     0.0     0.0     0.0     0.0
7015          DQ     0.0    18.2    61.5   119.3   188.6     0.0     0.0     0.0     0.0     0.0
              *

7016          KK  S01B66ROUTE
7017          KM        Cross-section: Estimated 3' deep ; side slopes and
7018          KM        width based on aerial / Manning's N Value: clean straight earth
7019          RS       1    FLOW
7020          RC   0.022   0.022   0.022    3048  0.0052    0.00
7021          RX  100.00  112.00  124.00  134.00  140.00  150.00  158.00  166.00
7022          RY  986.50  986.30  986.00  983.00  983.10  986.00  986.30  986.50
              *

7023          KK     B66BASIN
7024          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR
7025          KM        SYNDERS OF HANOVER DATED 11/11/05, FINAL DRAINAGE REPORT FOR
7026          KM        RANCHO EL  MIRAGE DATED 6/2/99
7027          BA   0.759
7028          LG    0.15    0.25    4.80    0.40      55
7029          UI       0     311     967    1778    1470     832     303     121      54       0
7030          UI       0       0       0       0       0       0       0       0       0       0
7031          UI       0       0       0       0       0       0       0       0       0       0
7032          UI       0       0       0       0       0       0       0       0       0       0
7033          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7034          KK  DB66REDIVERT
7035          KM        Final Drainage Report Snyder's of Hanover I-10 and Bullard Ave
7036          KM        Final Drainage Report for Rancho Mirage, Final Drainage Report for
7037          KM        Southwest Specialty Foods, Drainage Statement for Estrella Crossroads
7038          DT    RB66    76.2     0.0
7039          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7040          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7041          KK   CPB66COMBINE
7042          HC       3  46.045
              *

7043          KK  B66B68ROUTE
7044          KM        Cross-section: Bullard Wash Improvement
7045          KM        I-10 to Phase 1 Proposed CLOMR HEC-RAS
7046          KM        model, Section 18226.7
7047          RS       4    FLOW
7048          RC   0.036   0.036   0.036    5325  0.0030    0.00
7049          RX  100.00  126.70  172.70  183.00  213.60  221.80  293.20  313.40
7050          RY  963.50  958.80  958.50  956.50  953.40  958.50  958.80  963.50
              *

7051          KK   DS011RETRIEVE
7052          DR  DS011S
              *

7053          KK  S01S02ROUTE
7054          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7055          KM        width based on aerial / Manning's N Value: earth with
7056          KM        sparse trees and shrubs; clean straight earth LOB
7057          RS       1    FLOW
7058          RC   0.022   0.032   0.032    5352  0.0034    0.00
7059          RX  100.00  112.00  124.00  136.00  146.00  158.00  170.00  182.00
7060          RY  991.50  991.30  991.00  988.00  988.10  991.00  991.30  991.50
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                *
7061            KK     S02BASIN
7062            KM        BASIN BOUNDARY FROM 1990 TOPO, MASTER DRAINAGE PLAN FOR WILDFLOWER
7063            KM        COMMUNITY DATED 4/96 BY KEOGH ENGINEERING, DRAINAGE REPORT FOR DESERT
7064            KM        EDGE HIGH SCHOOL DATED 12/13/00 BY KPFF CONSULTING ENGINEERS
7065            BA   0.606
7066            LG    0.19    0.25    4.80    0.41      40
7067            UI       0     145     505     771    1247     907     581     266     143      57
7068            UI      33      34       0       0       0       0       0       0       0       0
7069            UI       0       0       0       0       0       0       0       0       0       0
7070            UI       0       0       0       0       0       0       0       0       0       0
7071            UI       0       0       0       0       0       0       0       0       0       0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7072            KK  DS02REDIVERT
7073            KM        Drainage Report for Desert Edge High School, Remaining retention volume
7074            DT    RS02    52.6     0.0
7075            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7076            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

7077            KK   CPS02COMBINE
7078            HC       2   0.874
                *

7079            KK   DS021DIVERT
7080            KM        Yuma at Estrella split flow
7081            DT  DS021S     0.0     0.0
7082            DI     0.0    26.4   184.9   540.1  1546.9     0.0     0.0     0.0     0.0     0.0
7083            DQ     0.0     5.3    79.0   220.3   670.4     0.0     0.0     0.0     0.0     0.0
                *

7084            KK   DS022DIVERT
7085            KM        Yuma at Estrella split flow
7086            DT  DS022S     0.0     0.0
7087            DI     0.0    21.1   105.9   319.8   876.5     0.0     0.0     0.0     0.0     0.0
7088            DQ     0.0     9.9    42.9    88.9   144.9     0.0     0.0     0.0     0.0     0.0
                *

7089            KK  S02B67ROUTE
7090            KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7091            KM        width based on aerial / Manning's N Value: clean straight
7092            KM        earth; earth with sparse trees and shrubs LOB and ROB
7093            RS       5    FLOW
7094            RC   0.032   0.022   0.032    1877  0.0021    0.00
7095            RX  100.00  120.00  140.00  148.00  152.00  160.00  168.00  176.00
7096            RY  972.50  972.30  972.00  970.00  970.10  972.00  972.30  972.50
                *

7097            KK     B67BASIN
7098            KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CENTERRA
7099            KM        DATED 11/20/00 BY PREMIER ENGINEERING CO.
7100            BA   0.328
7101            LG    0.20    0.25    4.80    0.38      54
7102            UI       0      94     317     503     712     457     257     104      51      20
7103            UI      20       0       0       0       0       0       0       0       0       0
7104            UI       0       0       0       0       0       0       0       0       0       0
7105            UI       0       0       0       0       0       0       0       0       0       0
7106            UI       0       0       0       0       0       0       0       0       0       0
                *

7107            KK  DB67REDIVERT
7108            KM        Drainage Report for Centerra (50% retention volume used)
7109            DT    RB67    33.2     0.0
7110            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7111            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                          HEC-1 INPUT                                          PAGE180

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


7112            KK   DS012RETRIEVE
7113            DR  DS012S
                *

7114            KK  S01B67ROUTE
7115            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7116            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7117            RS       1    FLOW
7118            RC   0.035   0.035   0.035    5930  0.0035    0.00
7119            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7120            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

7121            KK   CPB67COMBINE
7122            HC       3   1.202
                *

7123            KK  B67B68ROUTE
7124            KM        Cross-section: Estimated based on aerial
7125            KM        Manning's N Value: clean straight earth
7126            RS       3    FLOW
7127            RC   0.022   0.022   0.022    1410  0.0085    0.00
7128            RX  100.00  110.00  120.00  132.00  144.00  156.00  166.00  176.00
7129            RY  968.50  968.30  968.00  965.00  965.10  968.00  968.30  968.50
                *

7130            KK     B68BASIN
7131            KM        BASIN BOUNDARY FROM 1990 TOPO AND DRAINAGE REPORT
7132            KM        FOR CENTERRA DATED 11/20/00 BY PREMIER ENGINEERING CO.
7133            BA   0.736
7134            LG    0.16    0.24    5.30    0.32      46
7135            UI       0     222     742    1221    1577    1000     526     221      99      45
7136            UI      45       0       0       0       0       0       0       0       0       0
7137            UI       0       0       0       0       0       0       0       0       0       0
7138            UI       0       0       0       0       0       0       0       0       0       0
7139            UI       0       0       0       0       0       0       0       0       0       0
                *

7140            KK  DB68REDIVERT
7141            KM        Drainage Report for Centerra (50% retention volume used)
7142            DT    RB68    82.9     0.0
7143            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7144            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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                *
7145            KK   CPB68COMBINE
7146            HC       3  47.715
                *
1                                          HEC-1 INPUT                                                    PAGE181

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

7147            KK  B68B69ROUTE
7148            KM        Cross-section: Bullard Wash Improvement
7149            KM        I-10 to Phase 1 Proposed CLOMR HEC-RAS
7150            KM        model, Section 16366.6
7151            RS       3    FLOW
7152            RC   0.033   0.025   0.033    5518  0.0029    0.00
7153            RX  100.00  133.40  149.10  221.80  231.20  273.60  289.30  308.70
7154            RY  958.20  955.70  952.20  951.20  951.10  952.20  955.70  958.80
                *

7155            KK     B69BASIN
7156            KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7157            BA   0.909
7158            LG    0.12    0.25    5.30    0.34      57
7159            UI       0     392    1227    2238    1712     921     324     123      67       0
7160            UI       0       0       0       0       0       0       0       0       0       0
7161            UI       0       0       0       0       0       0       0       0       0       0
7162            UI       0       0       0       0       0       0       0       0       0       0
7163            UI       0       0       0       0       0       0       0       0       0       0
                *

7164            KK  DB69REDIVERT
7165            KM        Additional Retention based on 100yr 6hr retention.
7166            KM        C value is based on future land use, P=3.2, A=acres
7167            DT    RB69    99.2     0.0
7168            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7169            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

7170            KK   DS022RETRIEVE
7171            DR  DS022S
                *

7172            KK  S02B69ROUTE
7173            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7174            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7175            RS      23    FLOW
7176            RC   0.035   0.035   0.035    6447  0.0043    0.00
7177            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7178            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

7179            KK   CPB69COMBINE
7180            HC       3  48.624
                *

7181            KK  B69B70ROUTE
7182            KM        As Built plans for Bullard Wash Imprv, FCD 4700731
7183            KM        8/2008, N Value: earth with sparse trees and shrubs
7184            RS       2    FLOW
7185            RC   0.035   0.022   0.035    4315  0.0012    0.00
7186            RX  100.00  115.00  121.00  127.00  207.00  211.00  215.00  225.00
7187            RY  942.00  937.00  935.00  933.00  932.90  935.00  937.00  942.00
                *
1                                          HEC-1 INPUT                                                    PAGE182

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

7188            KK     B85BASIN
7189            KM        BASIN BOUNDARY FROM 1990 TOPO
7190            BA   0.408
7191            LG    0.10    0.25    5.80    0.27      82
7192            UI       0     126     424     704     885     539     269     117      48      26
7193            UI       0       0       0       0       0       0       0       0       0       0
7194            UI       0       0       0       0       0       0       0       0       0       0
7195            UI       0       0       0       0       0       0       0       0       0       0
7196            UI       0       0       0       0       0       0       0       0       0       0
                *

7197            KK  DB85REDIVERT
7198            KM        Final Drainage Report for Central Marketplace, Drainage Report for
7199            KM        the Roomstore, Drainage Report for Palm Valley Condominiums
7200            KM        Drainage Report for Palm Valley Crossing Phase II, Remaining
7201            KM        retention volume estimated from aerial
7202            DT    RB85    47.2     0.0
7203            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7204            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

7205            KK  B85B86ROUTE
7206            KM        Cross-section: Estimated based on aerial
7207            KM        Manning's N Value: street and ROW
7208            RS       9    FLOW
7209            RC   0.022   0.016   0.022    5274  0.0030    0.00
7210            RX  100.00  120.00  141.00  143.00  226.00  228.00  248.00  269.00
7211            RY  1001.0 1000.50 1000.00  999.60  999.50 1000.00 1000.50 1001.00
                *

7212            KK     B86BASIN
7213            KM        BASIN BOUNDARY FROM 1990 TOPO
7214            BA   0.619
7215            LG    0.18    0.25    5.10    0.34      49
7216            UI       0     134     485     734    1208     957     622     327     164      79
7217            UI      33      34       0       0       0       0       0       0       0       0
7218            UI       0       0       0       0       0       0       0       0       0       0
7219            UI       0       0       0       0       0       0       0       0       0       0
7220            UI       0       0       0       0       0       0       0       0       0       0
                *

7221            KK  DB86REDIVERT
7222            KM        Retention volume estimated based on aerial
7223            DT    RB86    27.3     0.0
7224            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7225            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

7226            KK   CPB86COMBINE
7227            HC       2   1.027
                *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7228          KK  B86B89ROUTE
7229          KM        Cross-section: Estimated based on aerial
7230          KM        Manning's N Value: street and ROW
7231          RS       3    FLOW
7232          RC   0.022   0.016   0.022    4090  0.0024    0.00
7233          RX  100.00  111.00  121.00  123.00  206.00  208.00  220.00  240.00
7234          RY  1001.0  999.80  999.50  999.00  999.10  999.50  999.80 1001.00
              *

7235          KK     B87BASIN
7236          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7237          BA   0.273
7238          LG    0.18    0.25    5.20    0.32      51
7239          UI       0     121     374     675     512     271      96      36      20       0
7240          UI       0       0       0       0       0       0       0       0       0       0
7241          UI       0       0       0       0       0       0       0       0       0       0
7242          UI       0       0       0       0       0       0       0       0       0       0
7243          UI       0       0       0       0       0       0       0       0       0       0
              *

7244          KK  DB87REDIVERT
7245          KM        Retention volume estimated based on aerial
7246          DT    RB87     9.6     0.0
7247          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7248          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7249          KK  B87B88ROUTE
7250          KM        Cross-section: Estimated based on aerial
7251          KM        Manning's N Value: street and ROW
7252          RS       6    FLOW
7253          RC   0.022   0.016   0.022    7579  0.0021    0.00
7254          RX  100.00  102.00  105.00  107.00  243.00  245.00  247.00  250.00
7255          RY  1001.0 1000.10 1000.00  999.50  999.60 1000.00 1000.10 1001.00
              *

7256          KK     B88BASIN
7257          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7258          BA   0.509
7259          LG    0.20    0.25    4.80    0.39      50
7260          UI       0      61     170     304     390     563     719     540     414     308
7261          UI     179     105      73      44      19      19      18       0       0       0
7262          UI       0       0       0       0       0       0       0       0       0       0
7263          UI       0       0       0       0       0       0       0       0       0       0
7264          UI       0       0       0       0       0       0       0       0       0       0
              *

7265          KK  DB88REDIVERT
7266          KM        Retention volume estimated based on aerial
7267          DT    RB88    15.3     0.0
7268          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7269          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7270          KK   CPB88COMBINE
7271          HC       2   0.782
              *

7272          KK  B88B89ROUTE
7273          KM        Cross-section: Estimated based on aerial
7274          KM        Manning's N Value: street and ROW
7275          RS       3    FLOW
7276          RC   0.022   0.016   0.022    5377  0.0019    0.00
7277          RX  100.00  111.00  121.00  123.00  206.00  208.00  220.00  240.00
7278          RY  1001.0  999.80  999.50  999.00  999.10  999.50  999.80 1001.00
              *

7279          KK     B89BASIN
7280          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FIELD VISIT. PONDS BEHIND
7281          KM        RAILROAD TRACKS AND SPILLS INTO PHOENIX-GOODYEAR AIRPORT
7282          BA   0.377
7283          LG    0.15    0.25    4.80    0.40      54
7284          UI       0     111     372     603     812     518     283     117      54      23
7285          UI      22       0       0       0       0       0       0       0       0       0
7286          UI       0       0       0       0       0       0       0       0       0       0
7287          UI       0       0       0       0       0       0       0       0       0       0
7288          UI       0       0       0       0       0       0       0       0       0       0
              *

7289          KK  DB89REDIVERT
7290          KM        Final Drainage Report for Goodyear Public Storage
7291          DT    RB89    17.7     0.0
7292          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7293          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7294          KK   CPB89COMBINE
7295          HC       3   2.186
              *

7296          KK   SRB89STORAGE
7297          KM        Storage at airport ramp (WLB)
7298          KO
7299          RS       1    STOR
7300          SV            0.06    3.14   15.08   45.28  110.59  221.78  290.44  449.81
7301          SQ           10.00  100.00  250.00  370.00  380.00  383.00  383.00 8928.00
7302          SE  951.30  952.00  954.00  956.00  958.00  960.00  962.00  962.80  964.00
7303          ST
              *

7304          KK  DB89SWDIVERT
7305          KM        Divert flow from 96"""" Storm Drain into Agua Fria River.
7306          DT  DB89SD     0.0     0.0
7307          DI     0.0    10.0   100.0   250.0   370.0   380.0   500.0   600.0  5000.0     0.0
7308          DQ     0.0    10.0   100.0   250.0   370.0   380.0   380.0   380.0   380.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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7309          KK  B89B92ROUTE
7310          KM        Cross-section: Cross-section determined from 1991
7311          KM        topo and aerial / Manning's N Value: clean straight earth
7312          RS       1    FLOW
7313          RC   0.022   0.022   0.022    8019  0.0045    0.00
7314          RX  100.00  120.00  140.00  152.00  166.00  178.00  198.00  218.00
7315          RY  934.50  934.30  934.00  930.00  930.10  934.00  934.30  934.50
              *

7316          KK     B90BASIN
7317          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7318          BA   0.455
7319          LG    0.10    0.25    4.80    0.43      62
7320          UI       0     540    1663    1009     244      54       0       0       0       0
7321          UI       0       0       0       0       0       0       0       0       0       0
7322          UI       0       0       0       0       0       0       0       0       0       0
7323          UI       0       0       0       0       0       0       0       0       0       0
7324          UI       0       0       0       0       0       0       0       0       0       0
              *

7325          KK  DB90REDIVERT
7326          KM        Drainage Report for Goodyear Industrial Park
7327          DT    RB90    54.7     0.0
7328          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7329          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7330          KK  B90B91ROUTE
7331          KM        Cross-section: Cross-section determined from 1991 topo
7332          KM        Manning's N Value: avg value for cultivated areas from
7333          KM        Estimated Manning's Roughness Coefficient for Stream
7334          KM        Channels and Flood Plains in MC
7335          RS      42    FLOW
7336          RC   0.038   0.038   0.038    5756  0.0030    0.00
7337          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7338          RY  1078.0 1077.50 1076.50 1076.00 1076.30 1076.50 1077.50 1078.00
              *

7339          KK     B91BASIN
7340          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FINAL DRAINAGE REPORT FOR
7341          KM        VENIDA BUSINESS PARK AT CROSSPOINTE PHASE 1
7342          BA   0.586
7343          LG    0.11    0.25    4.70    0.44      55
7344          UI       0     272     830    1500    1079     540     195      65      44       0
7345          UI       0       0       0       0       0       0       0       0       0       0
7346          UI       0       0       0       0       0       0       0       0       0       0
7347          UI       0       0       0       0       0       0       0       0       0       0
7348          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7349          KK  DB91REDIVERT
7350          KM        Final Drainage Report for Venida Business Park at
7351          KM        Crosspointe Phase I
7352          DT    RB91    73.0     0.0
7353          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7354          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7355          KK   CPB91COMBINE
7356          HC       2   1.041
              *

7357          KK  B91B92ROUTE
7358          KM        Cross-section: Cross-section determined from 1991 topo
7359          KM        Manning's N Value: clean straight earth
7360          RS      45    FLOW
7361          RC   0.022   0.022   0.022   12337  0.0033    0.00
7362          RX  100.00  150.00  190.00  230.00  290.00  350.00  370.00  390.00
7363          RY  956.50  956.30  956.00  954.00  954.10  956.00  957.00  958.00
              *

7364          KK     B92BASIN
7365          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7366          KM        ROUTING FROM BULLARD WASH IMPROV PLANS
7367          BA   1.371
7368          LG    0.15    0.25    4.80    0.40      32
7369          UI       0     425    1422    2365    2978    1810     903     394     162      85
7370          UI       0       0       0       0       0       0       0       0       0       0
7371          UI       0       0       0       0       0       0       0       0       0       0
7372          UI       0       0       0       0       0       0       0       0       0       0
7373          UI       0       0       0       0       0       0       0       0       0       0
              *

7374          KK  DB92REDIVERT
7375          KM        Additional Retention based on 100yr 6hr retention.
7376          KM        C value is based on future land use, P=3.2, A=acres
7377          DT    RB92    12.6     0.0
7378          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7379          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7380          KK   CPB92COMBINE
7381          HC       3   4.598
              *

7382          KK  B92B70ROUTE
7383          KM        Cross-section: Cross-section determined from aerial
7384          KM        and 1991 topo / Manning's N Value: concrete channel
7385          RS       1    FLOW
7386          RC   0.016   0.016   0.016     115  0.0010    0.00
7387          RX  100.00  120.00  140.00  156.00  172.00  188.00  208.00  228.00
7388          RY  930.50  930.30  930.00  920.00  920.10  930.00  930.30  930.50
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7389          KK     B70BASIN
7390          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
7391          BA   0.110
7392          LG    0.12    0.25    5.10    0.36      42
7393          UI       0      96     307     296     111      29      11       0       0       0
7394          UI       0       0       0       0       0       0       0       0       0       0
7395          UI       0       0       0       0       0       0       0       0       0       0
7396          UI       0       0       0       0       0       0       0       0       0       0
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7397          UI       0       0       0       0       0       0       0       0       0       0
              *

7398          KK  DB70REDIVERT
7399          KM        Additional Retention based on 100yr 6hr retention.
7400          KM        C value is based on future land use, P=3.2, A=acres
7401          DT    RB70     7.0     0.0
7402          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7403          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7404          KK   CPB70COMBINE
7405          HC       3  53.332
              *

7406          KK  B70B93ROUTE
7407          KM        Cross-section: As-builts for Bullard Wash Channel Improvements
7408          KM        Project FCD No 4700731 by Sverdrup dated August 2008,
7409          KM        from UPRR to Broadway Rd-A3
7410          RS       1    FLOW
7411          RC   0.035   0.022   0.035   1268  0.0012    0.00
7412          RX  100.00  110.00  114.00  118.00  198.00  202.00  206.00  216.00
7413          RY  920.00  915.00  913.00  911.00  910.90  913.00  915.00  920.00
              *

7414          KK     B93BASIN
7415          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
7416          BA   0.424
7417          LG    0.11    0.25    4.40    0.54      66
7418          UI       0      63     240     365     533     732     512     363     222     107
7419          UI      68      28      19      19       0       0       0       0       0       0
7420          UI       0       0       0       0       0       0       0       0       0       0
7421          UI       0       0       0       0       0       0       0       0       0       0
7422          UI       0       0       0       0       0       0       0       0       0       0
              *

7423          KK  DB93REDIVERT
7424          KM        Drainage Report for Goodyear 4 Industrial
7425          DT    RB93    40.5     0.0
7426          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7427          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE188

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

7428          KK   CPB93COMBINE
7429          HC       2  53.756
              *

7430          KK  B93B94ROUTE
7431          KM        Cross-section: As-builts for Bullard Wash Channel Improvements
7432          KM        Project FCD No 4700731 by Sverdrup dated August 2008,
7433          KM        from Broadway to Gila River-A2
7434          RS       1    FLOW
7435          RC   0.035   0.022   0.035    3258  0.0015    0.00
7436          RX  100.00  115.00  121.00  127.00  207.00  211.00  215.00  225.00
7437          RY  918.00  913.00  911.00  909.00  908.90  911.00  913.00  918.00
              *

7438          KK     B94BASIN
7439          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
7440          KM        FLOW ENTERS BUCKEYE CANAL
7441          BA   0.507
7442          LG    0.14    0.25    5.10    0.37      45
7443          UI       0     236     729    1312     926     456     168      52      38       0
7444          UI       0       0       0       0       0       0       0       0       0       0
7445          UI       0       0       0       0       0       0       0       0       0       0
7446          UI       0       0       0       0       0       0       0       0       0       0
7447          UI       0       0       0       0       0       0       0       0       0       0
              *

7448          KK  DB94REDIVERT
7449          KM        Additional Retention based on 100yr 6hr retention.
7450          KM        C value is based on future land use, P=3.2, A=acres
7451          DT    RB94    52.2     0.0
7452          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7453          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7454          KK   CPB94COMBINE
7455          HC       2  54.263
              *

7456          KK   DUMMYCOMBINE
7457          HC       2
              *

7458          KK    B101BASIN
7459          KM        BASIN BOUNDARY FROM 1990 TOPO AND ADOT MAPPING
7460          KM        INCLUDING CULVERT LOCATIONS FROM I-10 WIDENING PROJECT
7461          BA   0.076
7462          LG    0.10    0.25    4.80    0.42      85
7463          UI       0     253     302      31       0       0       0       0       0       0
7464          UI       0       0       0       0       0       0       0       0       0       0
7465          UI       0       0       0       0       0       0       0       0       0       0
7466          UI       0       0       0       0       0       0       0       0       0       0
7467          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7468          KK  SRB101STORAGE
7469          KM        Storage behind I-10
7470          KO
7471          RS       1    STOR
7472          SV            0.70    5.68    7.84   10.00
7473          SQ           16.00  227.00  435.00 1468.00
7474          SE  1005.5 1006.90 1009.50 1010.00 1011.00
7475          ST
              *

7476          KK   B101SROUTE
7477          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7478          KM        width based on aerial / Manning's N Value: grass
7479          RS       4    FLOW
7480          RC   0.025   0.025   0.025    4663  0.0034    0.00
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7481          RX  100.00  110.00  120.00  132.00  162.00  174.00  184.00  194.00
7482          RY  1006.5 1006.30 1006.00 1003.00 1003.10 1006.00 1006.30 1006.50
              *

7483          KK     S06BASIN
7484          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS UNIT 2 &
7485          KM        INFRASTRUCTURE DATED 7/20/02 BY CVL, DRAINAGE REPORT FOR CANYON TRAILS
7486          KM        UNIT 3A DATED 3/28/03 BY CVL, FINAL DRAINAGE REPORT FOR TRAVIS PARK AT
7487          KM        CANYON TRAILS PARCEL 3M1
7488          BA   0.390
7489          LG    0.25    0.25    4.80    0.34      28
7490          UI       0      91     323     492     802     582     377     173      95      39
7491          UI      21      21       0       0       0       0       0       0       0       0
7492          UI       0       0       0       0       0       0       0       0       0       0
7493          UI       0       0       0       0       0       0       0       0       0       0
7494          UI       0       0       0       0       0       0       0       0       0       0
              *

7495          KK  DS06REDIVERT
7496          KM        Borrow Pit (volume estimated from 1990 topo), Drainage Report
7497          KM        for Canyon Trails Unit 3A (portion of retention used), Final
7498          KM        Drainage Report for Travis Park at Canyon Trails Parcel 3M
7499          KM        (portion of retention used), Preliminary Drainage Report Arizona
7500          KM        Public Service Company Wildflower Substation, Drainage Report
7501          KM        or Verle Naber, Remaining retention volume estimated from aerial
7502          DT    RS06   657.1     0.0
7503          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7504          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7505          KK   CPS06COMBINE
7506          HC       2   0.466
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7507          KK  S06S07ROUTE
7508          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7509          KM        width based on aerial / Manning's N Value: earth with
7510          KM        sparse trees and shrubs
7511          RS       7    FLOW
7512          RC   0.032   0.032   0.032    6891  0.0033    0.00
7513          RX  100.00  104.00  108.00  120.00  130.00  142.00  146.00  150.00
7514          RY  990.50  990.30  990.00  987.00  987.10  990.00  990.30  990.50
              *

7515          KK     S07BASIN
7516          KM        BASIN BOUNDARY FROM MASTER DRAINAGE PLAN
7517          KM        FOR WILDFLOWER COMMUNITY DATED 4/96 BY KEOGH ENGINEERING
7518          BA   0.423
7519          LG    0.24    0.25    4.70    0.38      36
7520          UI       0      62     240     359     518     741     509     363     227     106
7521          UI      70      30      19      19       0       0       0       0       0       0
7522          UI       0       0       0       0       0       0       0       0       0       0
7523          UI       0       0       0       0       0       0       0       0       0       0
7524          UI       0       0       0       0       0       0       0       0       0       0
              *

7525          KK  DS07REDIVERT
7526          KM        Master Drainage Plan Wildflower Community
7527          DT    RS07    40.8     0.0
7528          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7529          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7530          KK   CPS07COMBINE
7531          HC       2   0.889
              *

7532          KK  S07S08ROUTE
7533          KM        Cross-section: Estimated 3' deep and 4:1 side
7534          KM        slopes, width based on aerial / Manning's N Value
7535          KM        earth with sparse trees and shrubs
7536          RS       5    FLOW
7537          RC   0.032   0.032   0.032    5382  0.0039    0.00
7538          RX  100.00  102.00  104.00  116.00  126.00  138.00  158.00  178.00
7539          RY  952.50  952.30  952.00  949.00  949.10  952.00  952.30  952.50
              *

7540          KK     S08BASIN
7541          KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
7542          KM        A THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
7543          KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
7544          KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE PH
7545          BA   0.267
7546          LG    0.23    0.25    4.65    0.39      33
7547          UI       0      60     216     326     533     406     265     130      67      30
7548          UI      15      15       0       0       0       0       0       0       0       0
7549          UI       0       0       0       0       0       0       0       0       0       0
7550          UI       0       0       0       0       0       0       0       0       0       0
1                                        HEC-1 INPUT                                        PAGE191

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

7551          UI       0       0       0       0       0       0       0       0       0       0
              *

7552          KK  DS08REDIVERT
7553          KM        Drainage Design Report for Pueblo Verde (portion of retention
7554          KM        used), Remaining retention volume estimated from aerial
7555          DT    RS08    33.5     0.0
7556          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7557          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7558          KK   CPS08COMBINE
7559          HC       2   1.156
              *

7560          KK  S08S09ROUTE
7561          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7562          KM        width based on aerial / Manning's N Value: clean straight earth
7563          RS       3    FLOW
7564          RC   0.022   0.022   0.022    5017  0.0080    0.00
7565          RX  100.00  102.00  104.00  116.00  136.00  148.00  158.00  166.00
7566          RY  936.50  936.30  936.00  933.00  933.10  936.00  936.30  936.50
              *
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7567        KK     S09BASIN
7568        KM        BASIN BOUNDARY FROM DRAINAGE REPORT
7569        KM        FOR SARIVAL VILLAGE PARCEL 7 DATED 7/27/04 BY CMX
7570        BA   0.370
7571        LG    0.17    0.25    4.60    0.44      42
7572        UI       0     130     420     740     766     461     195      94      26      24
7573        UI       0       0       0       0       0       0       0       0       0       0
7574        UI       0       0       0       0       0       0       0       0       0       0
7575        UI       0       0       0       0       0       0       0       0       0       0
7576        UI       0       0       0       0       0       0       0       0       0       0
            *

7577        KK  DS09REDIVERT
7578        KM        Drainage Report for Sarival Village Parcel 7, Preliminary
7579        KM        Drainage Report Sarival Crossing Business Park, Drainage
7580        KM        Report for Gordon-Darby Goodyear, Drainage Report for
7581        KM        Parcel #500-06-314, Remaining retention volume
7582        KM        estimated from aerial
7583        DT    RS09    38.7     0.0
7584        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7585        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

7586        KK   CPS09COMBINE
7587        HC       2   1.526
            *
1                                   HEC-1 INPUT                                          PAGE192

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

7588        KK   SRS09STORAGE
7589        KM        Storage behind UPRR
7590        KO
7591        RS       1    STOR
7592        SV            6.00   20.90   43.80   78.60
7593        SQ                          750.00 3076.00
7594        SE  909.00  910.00  911.00  912.60  913.10
7595        ST
            *

7596        KK   DS091DIVERT
7597        KM        MC85/RR Tracks/Sarival split flow
7598        DT  DS091W     0.0     0.0
7599        DI     0.0   750.6  3075.7  7642.2 13750.7     0.0     0.0     0.0     0.0     0.0
7600        DQ     0.0   501.7  2037.5  5216.1  9516.4     0.0     0.0     0.0     0.0     0.0
            *

7601        KK   DS092DIVERT
7602        KM        MC85/RR Tracks/Sarival split flow
7603        DT  DS092W     0.0     0.0
7604        DI     0.0   248.9  1038.2  2426.1  4234.3     0.0     0.0     0.0     0.0     0.0
7605        DQ     0.0     1.9    27.9    69.2   121.4     0.0     0.0     0.0     0.0     0.0
            *

7606        KK  S09S23ROUTE
7607        KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7608        KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7609        RS       1    FLOW
7610        RC   0.035   0.035   0.035    2041  0.0002    0.00
7611        RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7612        RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
            *

7613        KK     S21BASIN
7614        KM        BASIN BOUNDARY FROM SR801 2006 TOPO
7615        BA   0.126
7616        LG    0.13    0.25    4.55    0.47      72
7617        UI       0      82     250     368     187      59      18      11       0       0
7618        UI       0       0       0       0       0       0       0       0       0       0
7619        UI       0       0       0       0       0       0       0       0       0       0
7620        UI       0       0       0       0       0       0       0       0       0       0
7621        UI       0       0       0       0       0       0       0       0       0       0
            *

7622        KK  DS21REDIVERT
7623        KM        Additional Retention based on 100yr 6hr retention.
7624        KM        C value is based on future land use, P=3.2, A=acres
7625        DT    RS21    15.8     0.0
7626        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7627        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *
1                                   HEC-1 INPUT                                          PAGE193

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

7628        KK  DS21SEDIVERT
7629        KM        Converging basins at road, assume 50-50 split
7630        DT   DS21S     0.0     0.0
7631        DI     0.0   100.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0
7632        DQ     0.0    50.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

7633        KK  S21S23ROUTE
7634        KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7635        KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7636        RS      23    FLOW
7637        RC   0.035   0.035   0.035    3328  0.0010    0.00
7638        RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7639        RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
            *

7640        KK     S22BASIN
7641        KM        BASIN BOUNDARY FROM DRAINAGE REPORT
7642        KM        FOR SARIVAL GARDENS DATED 11/1/99 BY CLOUSE ENGINEERING INC.
7643        BA   0.267
7644        LG    0.30    0.25    4.60    0.34       5
7645        UI       0      38     140     217     303     455     329     239     161      74
7646        UI      49      26      12      12      12       0       0       0       0       0
7647        UI       0       0       0       0       0       0       0       0       0       0
7648        UI       0       0       0       0       0       0       0       0       0       0
7649        UI       0       0       0       0       0       0       0       0       0       0
            *

7650        KK  DS22REDIVERT
7651        KM        Drainage Report for Sarival Gardens
7652        DT    RS22    11.8     0.0
7653        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7654        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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7655            KK  S22S23ROUTE
7656            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7657            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7658            RS       7    FLOW
7659            RC   0.035   0.035   0.035    5505  0.0065    0.00
7660            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7661            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

7662            KK     S23BASIN
7663            KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR ESTRELLA-INDUSTRIAL
7664            KM        PARK DATED 1/4/00 BY CVL AND MASTER DRAINAGE REPORT FOR GOODYEAR
7665            KM        CROSSING INDUSTRIAL PARK DATED 11/29/07 BY V3
7666            BA   1.029
7667            LG   0.21    0.25    4.50    0.43      34
7668            UI      0     410    1283    2355    2008    1164     436     177      72       0
7669            UI      0       0       0       0       0       0       0       0       0       0
7670            UI      0       0       0       0       0       0       0       0       0       0
7671            UI      0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE194

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

7672            UI      0       0       0       0       0       0       0       0       0       0
                *

7673            KK  DS23REDIVERT
7674            KM        Master Drainage Report for Estrella - Industrial Park
7675            DT    RS23   129.0     0.0
7676            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7677            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

7678            KK   CPS23COMBINE
7679            HC       4   2.948
                *

7680            KK   SRS23STORAGE
7681            KM        Storage behind UPRR (WLB)
7682            KO
7683            RS       1    STOR
7684            SV            0.04    0.10    0.12    0.26   58.75  156.65
7685            SQ           11.00   14.00   23.00  370.00 7710.0038388.00
7686            SE  904.40  905.20  905.50  906.00  908.10  910.00  911.20
7687            ST
                *

7688            KK  S23S24ROUTE
7689            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7690            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7691            RS       7    FLOW
7692            RC   0.035   0.035   0.035    2937  0.0027    0.00
7693            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7694            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

7695            KK     S24BASIN
7696            KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS BEHIND
7697            KM        BUCKEYE CANAL AND OVERTOPS
7698            BA   0.416
7699            LG   0.23    0.25    5.00    0.33      38
7700            UI      0     166     519     952     811     471     176      72      28       0
7701            UI      0       0       0       0       0       0       0       0       0       0
7702            UI      0       0       0       0       0       0       0       0       0       0
7703            UI      0       0       0       0       0       0       0       0       0       0
7704            UI      0       0       0       0       0       0       0       0       0       0
                *

7705            KK  DS24REDIVERT
7706            KM        Additional Retention based on 100yr 6hr retention.
7707            KM        C value is based on future land use, P=3.2, A=acres
7708            DT    RS24    40.9     0.0
7709            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7710            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7711            KK     S03BASIN
7712            KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
7713            KM        A THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
7714            KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
7715            KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE
7716            KM        PHASE D DATED 1/4/02 BY CMX
7717            BA   0.719
7718            LG   0.23    0.25    4.80    0.36      40
7719            UI      0      76     175     345     441     570     831     856     653     507
7720            UI    392     268     137     112      77      35      23      24      23      23
7721            UI      0       0       0       0       0       0       0       0       0       0
7722            UI      0       0       0       0       0       0       0       0       0       0
7723            UI      0       0       0       0       0       0       0       0       0       0
                *

7724            KK  DS03REDIVERT
7725            KM        Master Drainage Study Estrella Vista Parcels A Through H
7726            KM        and Parcel 8, Drainage Design Report for Pueblo Verde
7727            KM        (portion of retention used), Drainage Report for Sarival Village
7728            KM        Parcel 2, Drainage Report for Sarival Village Parcel 4
7729            KM        Drainage Report for Sarival Village Parcel 5
7730            DT    RS03    66.0     0.0
7731            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7732            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

7733            KK   DS021RETRIEVE
7734            DR  DS021S
                *

7735            KK  S02S03ROUTE
7736            KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7737            KM        width based on aerial / Manning's N Value: clean straight earth
7738            RS      16    FLOW
7739            RC   0.022   0.022   0.022    5334  0.0037    0.00
7740            RX  100.00  114.00  128.00  140.00  150.00  162.00  182.00  202.00
7741            RY  970.50  970.30  970.00  967.00  967.10  970.00  970.10  970.20
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7742          KK   CPS03COMBINE
7743          HC       2   1.593
              *

7744          KK  S03S04ROUTE
7745          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7746          KM        width based on aerial / Manning's N Value: earth
7747          KM        with sparse trees and shrubs
7748          RS      41    FLOW
7749          RC   0.032   0.032   0.032    5843  0.0065    0.00
7750          RX  100.00  120.00  140.00  210.00  470.00  482.00  492.00  502.00
7751          RY  918.00  917.80  917.50  916.00  916.10  918.00  918.20  918.30
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7752          KK     S04BASIN
7753          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR SARIVAL VILLAGE PHASE B1 AND
7754          KM        B2 DATED 10/3/01 BY CMX AND DRAINAGE REPORT FOR SARVIAL VILLAGE PARCEL 6
7755          KM        DATED 10/3/01 BY CMX
7756          BA   0.702
7757          LG    0.16    0.25    4.70    0.41      49
7758          UI       0     244     789    1381    1459     886     378     180      54      45
7759          UI       0       0       0       0       0       0       0       0       0       0
7760          UI       0       0       0       0       0       0       0       0       0       0
7761          UI       0       0       0       0       0       0       0       0       0       0
7762          UI       0       0       0       0       0       0       0       0       0       0
              *

7763          KK  DS04REDIVERT
7764          KM        Drainage Report for Sarival Village Parcel 6, Arizona Galvanizing
7765          KM        Drainage Report, Hydrologic and Hydraulics Report for Estrella
7766          KM        Crossings Business Park, Remaining retention volume estimated from aeria
7767          DT    RS04    79.5     0.0
7768          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7769          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7770          KK   CPS04COMBINE
7771          HC       2   2.295
              *

7772          KK   SRS04STORAGE
7773          KM        Storage behind UPRR (WLB)
7774          KO
7775          RS       1    STOR
7776          SV            0.08    8.33   14.16   23.37
7777          SQ           50.00  285.00  778.00 4586.00
7778          SE  908.50  910.10  914.00  915.00  916.00
7779          ST
              *

7780          KK  S04S10ROUTE
7781          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7782          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7783          RS      10    FLOW
7784          RC   0.035   0.035   0.035    4699  0.0021    0.00
7785          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7786          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7787          KK   DS091RETRIEVE
7788          DR  DS091W
              *
1                                        HEC-1 INPUT                                                    PAGE197

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


7789          KK  S09S10ROUTE
7790          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7791          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7792          RS       1    FLOW
7793          RC   0.035   0.035   0.035    2851  0.0007    0.00
7794          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7795          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7796          KK     S05BASIN
7797          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
7798          KM        AND TRAVELS WEST
7799          BA   0.212
7800          LG    0.11    0.25    4.90    0.41      57
7801          UI       0     105     317     563     381     174      67      18      16       0
7802          UI       0       0       0       0       0       0       0       0       0       0
7803          UI       0       0       0       0       0       0       0       0       0       0
7804          UI       0       0       0       0       0       0       0       0       0       0
7805          UI       0       0       0       0       0       0       0       0       0       0
              *

7806          KK  DS05REDIVERT
7807          KM        Additional Retention based on 100yr 6hr retention.
7808          KM        C value is based on future land use, P=3.2, A=acres
7809          DT   RS045    22.6     0.0
7810          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7811          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7812          KK  S05S10ROUTE
7813          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7814          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7815          RS      30    FLOW
7816          RC   0.035   0.035   0.035    5430  0.0015    0.00
7817          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7818          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7819          KK     S10BASIN
7820          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
7821          KM        AND TRAVELS WEST
7822          BA   0.615
7823          LG    0.10    0.25    4.80    0.42      46
7824          UI       0     103     418     613     994    1025     691     452     208     124
7825          UI      57      31      31       0       0       0       0       0       0       0
7826          UI       0       0       0       0       0       0       0       0       0       0
7827          UI       0       0       0       0       0       0       0       0       0       0
7828          UI       0       0       0       0       0       0       0       0       0       0
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1                                        HEC-1 INPUT                                                    PAGE198

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

7829          KK  DS10REDIVERT
7830          KM        Additional Retention based on 100yr 6hr retention.
7831          KM        C value is based on future land use, P=3.2, A=acres
7832          DT    RS10    71.6     0.0
7833          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7834          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7835          KK   CPS10COMBINE
7836          HC       4   4.648
              *

7837          KK  S10S24ROUTE
7838          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7839          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7840          RS       7    FLOW
7841          RC   0.035   0.035   0.035    2857  0.0014    0.00
7842          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7843          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7844          KK   DS092RETRIEVE
7845          DR  DS092W
              *

7846          KK  S09S24ROUTE
7847          KM        Cross-section: Ag field, assumed 0.5% side slopes
7848          KM        V-ditch / Manning's N Value: avg value for cultivated
7849          KM        areas from Estimated Manning's Roughness Coefficient
7850          KM        for Stream Channels and Flood Plains in MC
7851          RS       1    FLOW
7852          RC   0.035   0.035   0.035    4898  0.0018    0.00
7853          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7854          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7855          KK   CPS24COMBINE
7856          HC       4   6.486
              *

7857          KK  S24S25ROUTE
7858          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7859          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7860          RS      13    FLOW
7861          RC   0.035   0.035   0.035    5984  0.0020    0.00
7862          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7863          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                        HEC-1 INPUT                                                    PAGE199

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

7864          KK     W21BASIN
7865          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN,
7866          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
7867          BA   0.221
7868          LG    0.29    0.25    4.35    0.46      17
7869          UI       0      39     152     230     372     361     244     157      70      43
7870          UI      17      11      11       0       0       0       0       0       0       0
7871          UI       0       0       0       0       0       0       0       0       0       0
7872          UI       0       0       0       0       0       0       0       0       0       0
7873          UI       0       0       0       0       0       0       0       0       0       0
              *

7874          KK  DW21REDIVERT
7875          KM        Additional Retention based on 100yr 2hr retention.
7876          KM        C value is based on future land use, P=2.7, A=acres
7877          DT    DW21    15.3     0.0
7878          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7879          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7880          KK  W21L50ROUTE
7881          KM        Cross-section: Estimated 3' deep, side slopes and width based on
7882          KM        aerial / Manning's N Value: natural desert wash w/ vegetation
7883          RS       1    FLOW
7884          RC   0.035   0.035   0.035    6272  0.0056    0.00
7885          RX  100.00  110.00  120.00  146.00  166.00  236.00  256.00  276.00
7886          RY  1138.5 1138.30 1138.00 1132.00 1132.10 1136.00 1136.30 1136.50
              *

7887          KK     L50BASIN
7888          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
7889          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
7890          BA   0.498
7891          LG    0.25    0.25    4.15    0.52      25
7892          UI       0      90     352     523     860     813     539     342     154      92
7893          UI      35      25      25       0       0       0       0       0       0       0
7894          UI       0       0       0       0       0       0       0       0       0       0
7895          UI       0       0       0       0       0       0       0       0       0       0
7896          UI       0       0       0       0       0       0       0       0       0       0
              *

7897          KK  DL50REDIVERT
7898          KM        Additional Retention based on 100yr 2hr retention.
7899          KM        C value is based on future land use, P=2.7, A=acres
7900          DT    RL50    34.5     0.0
7901          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7902          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                                    PAGE200

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

7903          KK   CPL50COMBINE
7904          HC       2   0.719
              *

7905          KK  L50L51ROUTE
7906          KM        Cross-section: Cross-section determined from aerial
7907          KM        Manning's N Value: clean earth; straight, street ROB
7908          RS      10    FLOW
```

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7909          RC   0.022   0.022   0.013    2654  0.0049    0.00
7910          RX  100.00  101.00  330.00  340.00  346.00  356.00  371.00  386.00
7911          RY  1126.5 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.50
              *

7912          KK     L51BASIN
7913          KM        BASIN BOUNDARY FROM COTTONWOOD ESTATES AND SAVANNAH
7914          BA   0.495
7915          LG    0.27    0.25    4.10    0.49      15
7916          UI       0      72     269     408     580     852     609     434     286     129
7917          UI      88      43      21      22       0       0       0       0       0       0
7918          UI       0       0       0       0       0       0       0       0       0       0
7919          UI       0       0       0       0       0       0       0       0       0       0
7920          UI       0       0       0       0       0       0       0       0       0       0
              *

7921          KK  DL51REDIVERT
7922          KM        Retention volume estimated based on aerial
7923          DT    RL51    26.9     0.0
7924          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7925          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7926          KK   DL461RETRIEVE
7927          DR  DL461S
              *

7928          KK  L46L51ROUTE
7929          KM        Cross-section: Cross-section determined from aerial
7930          KM        Manning's N Value: earth w/ sparse trees and brush
7931          RS       4    FLOW
7932          RC   0.032   0.032   0.032    5512  0.0045    0.00
7933          RX  100.00  105.00  110.00  130.00  150.00  170.00  190.00  210.00
7934          RY  1124.5 1124.30 1124.00 1120.00 1120.10 1124.00 1124.30 1124.50
              *

7935          KK   CPL51COMBINE
7936          HC       3   3.066
              *

7937          KK  L51L52ROUTE
7938          KM        Cross-section: Estimated 4:1 sideslopes, width based on
7939          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
7940          RS       3    FLOW
7941          RC   0.032   0.032   0.032    2644  0.0034    0.00
7942          RX  100.00  122.00  144.00  156.00  176.00  188.00  200.00  212.00
```



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

7943          RY  1117.5 1116.25 1116.00 1113.00 1113.10 1116.00 1116.25 1117.50
              *

7944          KK     L52BASIN
7945          KM        BASIN BOUNDARY FROM RUSSEL RANCH PHASE 1 AND PHASE 2
7946          BA   0.498
7947          LG    0.26    0.25    4.00    0.53      20
7948          UI       0      61     187     322     417     623     704     513     381     274
7949          UI     134      96      63      22      19      19      18       0       0       0
7950          UI       0       0       0       0       0       0       0       0       0       0
7951          UI       0       0       0       0       0       0       0       0       0       0
7952          UI       0       0       0       0       0       0       0       0       0       0
              *

7953          KK  DL52REDIVERT
7954          KM        Retention volume estimated based on aerial
7955          DT    RL52    31.7     0.0
7956          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7957          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7958          KK   DL462RETRIEVE
7959          DR  DL462S
              *

7960          KK  L46L52ROUTE
7961          KM        Cross-section: Estimated 4:1 sideslopes, width based on
7962          KM        aerial, included wall / Manning's N Value: gravel
7963          RS       7    FLOW
7964          RC   0.023   0.023   0.023    7754  0.0044    0.00
7965          RX  100.00  102.00  107.00  122.00  134.00  149.00  154.00  154.10
7966          RY  1000.5 1000.00  998.00  996.00  996.10  998.00 1000.00 1000.50
              *

7967          KK   DL471RETRIEVE
7968          DR  DL471S
              *

7969          KK  L47L52ROUTE
7970          KM        Cross-section: Cross section estimated from aerial
7971          KM        Manning's N Value: clean earth; straight; street LOB
7972          RS       6    FLOW
7973          RC   0.016   0.022   0.022    5307  0.0038    0.00
7974          RX  100.00  132.00  138.00  144.00  148.00  152.00  156.00  160.00
7975          RY  1118.5 1118.00 1117.00 1116.00 1115.90 1117.00 1118.00 1118.50
              *

7976          KK   CPL52COMBINE
7977          HC       4   4.801
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7978          KK   DL521DIVERT
7979          KM        Camelback at Citrus split flow
7980          DT  DL521S     0.0     0.0
7981          DI     0.0   349.6  1281.0  3821.5  7631.2     0.0     0.0     0.0     0.0     0.0
7982          DQ     0.0    29.6   306.8  1432.6  3229.3     0.0     0.0     0.0     0.0     0.0
              *

7983          KK   DL522DIVERT
7984          KM        Camelback at Citrus split flow
7985          DT  DL522S     0.0     0.0
7986          DI     0.0   320.1   974.2  2389.0  4401.9     0.0     0.0     0.0     0.0     0.0
7987          DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
              *

7988          KK  L52L53ROUTE
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7989          KM        Cross-section: Cross-section determined from aerial
7990          KM        Manning's N Value: clean earth; straight; street ROB
7991          RS       4    FLOW
7992          RC   0.022   0.022   0.016    5286  0.0045    0.00
7993          RX  100.00  220.00  240.00  246.00  256.00  262.00  274.00  286.00
7994          RY  1094.5 1093.00 1092.50 1092.00 1092.10 1094.00 1094.25 1094.50
              *

7995          KK     L53BASIN
7996          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND AG LAND
7997          BA   1.002
7998          LG    0.21    0.25    4.45    0.44      39
7999          UI       0     151     607     910    1359    1732    1186     818     457     244
8000          UI     143      47      46      47       0       0       0       0       0       0
8001          UI       0       0       0       0       0       0       0       0       0       0
8002          UI       0       0       0       0       0       0       0       0       0       0
8003          UI       0       0       0       0       0       0       0       0       0       0
              *

8004          KK  DL53REDIVERT
8005          KM        Additional Retention based on 100yr 2hr retention.
8006          KM        C value is based on future land use, P=2.7, A=acres
8007          DT    RL53    82.8     0.0
8008          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8009          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8010          KK   DL472RETRIEVE
8011          DR  DL472S
              *

8012          KK  L47L53ROUTE
8013          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8014          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8015          RS       3    FLOW
8016          RC   0.035   0.035   0.035    7479  0.0064    0.00
8017          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8018          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                    HEC-1 INPUT                                          PAGE203

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

8019          KK   DL481RETRIEVE
8020          DR  DL481S
              *

8021          KK  L48L53ROUTE
8022          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8023          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8024          RS      13    FLOW
8025          RC   0.035   0.035   0.035    5346  0.0041    0.00
8026          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8027          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8028          KK   CPL53COMBINE
8029          HC       4   7.803
              *

8030          KK   DL531DIVERT
8031          KM        Camelback at Cotton split flow
8032          DT  DL531S     0.0     0.0
8033          DI     0.0   351.4  1270.7  2947.6  5463.3     0.0     0.0     0.0     0.0     0.0
8034          DQ     0.0    10.3   376.9  1055.3  2049.3     0.0     0.0     0.0     0.0     0.0
              *

8035          KK   DL532DIVERT
8036          KM        Camelback at Cotton split flow
8037          DT  DL532S     0.0     0.0
8038          DI     0.0   341.1   893.8  1892.3  3414.0     0.0     0.0     0.0     0.0     0.0
8039          DQ     0.0     2.8    41.8   103.8   182.1     0.0     0.0     0.0     0.0     0.0
              *

8040          KK  L53L54ROUTE
8041          KM        Cross-section: Cross-section determined from aerial
8042          KM        Manning's N Value: natural wash with heavy vegetation
8043          RS       2    FLOW
8044          RC   0.045   0.045   0.045    2532  0.0039    0.00
8045          RX  100.00  105.00  110.00  115.10  135.00  141.00  148.00  175.00
8046          RY  1080.0 1078.00 1076.50 1075.00 1074.90 1076.50 1078.00 1080.00
              *

8047          KK   SRL54STORAGE
8048          KM        STORAGE THROUGH CAMELBACK BASIN AT NORTHWEST CORNER
8049          KM        OF CAMELBACK AND LOOP 303-DB237,
8050          KM        REC-EWP.OUT MODEL, JULY 14, 2008
8051          KO
8052          RS       1    STOR
8053          SV            4.80    9.80   15.10   20.60   26.50   32.60
8054          SQ           45.00   91.00  136.00  182.00  222.00  257.00
8055          SE  1040.0 1041.00 1042.00 1043.00 1044.00 1045.00 1046.00
8056          ST
              *
1                                    HEC-1 INPUT                                          PAGE204

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

8057          KK  L54L58ROUTE
8058          KM        Cross-section: Cross-section determined from
8059          KM        Camelback CAR model REC-EWP.OUT
8060          KM        dated July 14, 2008, ~RLP8
8061          RS       2    FLOW
8062          RC   0.020   0.020   0.020    5306  0.0034    0.00
8063          RX  100.00  108.00  109.00  110.00  116.00  117.00  118.00  126.00
8064          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

8065          KK     L55BASIN
8066          KM        BASIN BOUNDARY FROM 1990 TOPO
8067          BA   0.497
8068          LG    0.30    0.25    4.00    0.52      12
8069          UI       0      69     251     390     539     838     620     453     316     148
8070          UI      97      57      21      22      21       0       0       0       0       0
8071          UI       0       0       0       0       0       0       0       0       0       0
8072          UI       0       0       0       0       0       0       0       0       0       0
8073          UI       0       0       0       0       0       0       0       0       0       0
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8074          KK  DL55REDIVERT
8075          KM        Retention volume estimated based on aerial
8076          DT    RL55     24.4     0.0
8077          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8078          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8079          KK   DL551DIVERT
8080          KM        Indian School at Perryville split flow
8081          DT  DL551S      0.0     0.0
8082          DI     0.0    155.2  1033.7  2463.5  4920.4     0.0     0.0     0.0     0.0     0.0
8083          DQ     0.0      0.0    97.8   314.7   781.8     0.0     0.0     0.0     0.0     0.0
              *

8084          KK   DL552DIVERT
8085          KM        Indian School at Perryville split flow
8086          DT  DL552S      0.0     0.0
8087          DI     0.0    155.2   935.9  2148.8  4138.5     0.0     0.0     0.0     0.0     0.0
8088          DQ     0.0      7.9    34.3    71.1   115.9     0.0     0.0     0.0     0.0     0.0
              *

8089          KK  L55L56ROUTE
8090          KM        Cross-section: Estimated 3' depth,  4:1 sideslopes
8091          KM        width based on aerial / Manning's N Value
8092          KM        clean earth; straight; street  ROB
8093          RS       5    FLOW
8094          RC   0.022    0.022   0.016    5334  0.0051    0.00
8095          RX  100.00  120.00  140.00  152.00  172.00  184.00  204.00  224.00
8096          RY  1096.5 1096.30 1096.00 1093.00 1093.10 1096.00 1096.30 1096.50
              *
1                                          HEC-1 INPUT                                          PAGE205

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

8097          KK     L56BASIN
8098          KM        SEDELLA
8099          BA   0.999
8100          LG    0.29     0.25    4.00    0.48       8
8101          UI       0      124     368     643     832    1230    1430    1021     773     551
8102          UI     274      197     123      48      39      38      38       0       0       0
8103          UI       0        0       0       0       0       0       0       0       0       0
8104          UI       0        0       0       0       0       0       0       0       0       0
8105          UI       0        0       0       0       0       0       0       0       0       0
              *

8106          KK  DL56REDIVERT
8107          KM        Retention volume estimated based on aerial
8108          DT    RL56    168.0     0.0
8109          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8110          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8111          KK   DL521RETRIEVE
8112          DR  DL521S
              *

8113          KK  L52L56ROUTE
8114          KM        Cross-section: Assumed v-ditch in ROW, widths based on aerials
8115          KM        Manning's N Value: clean earth; straight; street ROB
8116          RS       3    FLOW
8117          RC   0.016    0.022   0.022    5292  0.0051    0.00
8118          RX  100.00  112.00  122.00  128.00  134.00  140.00  152.00  164.00
8119          RY  1089.5 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1089.50
              *

8120          KK   CPL56COMBINE
8121          HC       3   6.297
              *

8122          KK   DL561DIVERT
8123          KM        Indian School at Citrus split flow
8124          DT  DL561S      0.0     0.0
8125          DI     0.0     74.1   987.7  4308.5  9171.0     0.0     0.0     0.0     0.0     0.0
8126          DQ     0.0      0.0   322.7  1829.1  4073.9     0.0     0.0     0.0     0.0     0.0
              *

8127          KK   DL562DIVERT
8128          KM        Indian School at Citrus split flow
8129          DT  DL562S      0.0     0.0
8130          DI     0.0     74.1   665.0  2479.3  5097.1     0.0     0.0     0.0     0.0     0.0
8131          DQ     0.0      1.7    15.7    37.0    63.6     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE206

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

8132          KK  L56L57ROUTE
8133          KM        Cross-section: Estimated 2' depth, width and side slopes based on aerial
8134          KM        Manning's N Value: clean earth; straight; street ROB
8135          RS       5    FLOW
8136          RC   0.022    0.022   0.013    5299  0.0034    0.00
8137          RX  100.00  101.00  108.00  118.00  124.00  134.00  145.00  146.00
8138          RY  1080.6 1080.50 1080.00 1078.00 1078.10 1080.00 1080.50 1080.60
              *

8139          KK     L57BASIN
8140          KM        BASIN BOUNDARY FROM TALAVERDE ESTATES, LIBRARY PROP TRUST, TEN303
8141          BA   0.997
8142          LG    0.18     0.25    4.45    0.46      49
8143          UI       0      154     639     948    1476    1707    1146     783     388     223
8144          UI     118       48      48       0       0       0       0       0       0       0
8145          UI       0        0       0       0       0       0       0       0       0       0
8146          UI       0        0       0       0       0       0       0       0       0       0
8147          UI       0        0       0       0       0       0       0       0       0       0
              *

8148          KK  DL57REDIVERT
8149          KM        Additional Retention based on 100yr 6hr retention.
8150          KM        C value is based on future land use, P=3.2, A=acres
8151          DT    RL57    102.8     0.0
8152          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8153          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8154          KK   DL522RETRIEVE
8155          DR  DL522S
              *
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8156          KK  L52L57ROUTE
8157          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8158          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8159          RS      17    FLOW
8160          RC   0.035   0.035   0.035    7451  0.0058    0.00
8161          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8162          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8163          KK   DL531RETRIEVE
8164          DR  DL531S
              *

8165          KK  L53L57ROUTE
8166          KM        Cross-section: Cross section estimated from aerial
8167          KM        Manning's N Value: street  ROW and clean earth
8168          RS       6    FLOW
8169          RC   0.016   0.022   0.022    5274  0.0032    0.00
8170          RX  100.00  113.00  126.00  141.00  166.00  186.00  201.00  214.00
8171          RY  1077.0 1076.25 1076.00 1075.00 1075.10 1076.00 1076.25 1077.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8172          KK   CPL57COMBINE
8173          HC       4  10.296
              *

8174          KK   DL571DIVERT
8175          KM        Indian School at Cotton split flow
8176          DT  DL571S     0.0     0.0
8177          DI     0.0    60.8   404.6  1424.5  3101.9     0.0     0.0     0.0     0.0     0.0
8178          DQ     0.0     2.7    39.0   238.0   569.0     0.0     0.0     0.0     0.0     0.0
              *

8179          KK   DL572DIVERT
8180          KM        Indian School at Cotton split flow
8181          DT  DL572S     0.0     0.0
8182          DI     0.0    58.1   365.6  1186.5  2532.9     0.0     0.0     0.0     0.0     0.0
8183          DQ     0.0     2.7    17.6    39.4    66.5     0.0     0.0     0.0     0.0     0.0
              *

8184          KK  L57L58ROUTE
8185          KM        Cross-section: Width and side slopes estimated from topo
8186          KM        and aerial / Manning's N Value: clean earth; straight
8187          RS       3    FLOW
8188          RC   0.022   0.022   0.022    2016  0.0030    0.00
8189          RX  100.00  102.00  104.00  106.00  206.00  254.00  264.00  274.00
8190          RY  1061.0 1060.00 1059.50 1059.00 1059.50 1060.00 1060.25 1061.00
              *

8191          KK     L58BASIN
8192          KM        BASIN BOUNDARY FROM 1990 TOPO
8193          BA   0.443
8194          LG   0.10    0.25    4.60    0.48      80
8195          UI      0     150     483     842     935     565     254     118      39      29
8196          UI      0       0       0       0       0       0       0       0       0       0
8197          UI      0       0       0       0       0       0       0       0       0       0
8198          UI      0       0       0       0       0       0       0       0       0       0
8199          UI      0       0       0       0       0       0       0       0       0       0
              *

8200          KK  DL58REDIVERT
8201          KM        Additional Retention based on 100yr 6hr retention.
8202          KM        C value is based on future land use, P=3.2, A=acres
8203          DT    RL58    53.4     0.0
8204          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8205          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8206          KK   DL532RETRIEVE
8207          DR  DL532S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8208          KK  L53L58ROUTE
8209          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8210          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8211          RS      15    FLOW
8212          RC   0.035   0.035   0.035    5615  0.0045    0.00
8213          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8214          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8215          KK   CPL58COMBINE
8216          HC       4  10.739
              *

8217          KK  L58L63ROUTE
8218          KM        Cross-section: Cross-section determined from
8219          KM        Camelback CAR model REC-EWP.OUT
8220          KM        dated July 14, 2008, -RLP9
8221          RS       1    FLOW
8222          RC   0.020   0.020   0.020    1423  0.0038    0.00
8223          RX  100.00  108.00  109.00  110.00  116.00  117.00  118.00  126.00
8224          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

8225          KK     L63BASIN
8226          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
8227          BA   0.089
8228          LG   0.10    0.25    4.55    0.49      81
8229          UI      0     155     388     123      19       0       0       0       0       0
8230          UI      0       0       0       0       0       0       0       0       0       0
8231          UI      0       0       0       0       0       0       0       0       0       0
8232          UI      0       0       0       0       0       0       0       0       0       0
8233          UI      0       0       0       0       0       0       0       0       0       0
              *

8234          KK  DL63REDIVERT
8235          KM        Additional Retention based on 100yr 6hr retention.
8236          KM        C value is based on future land use, P=3.2, A=acres
8237          DT    RL63    10.7     0.0
8238          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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8239          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8240          KK   DL572RETRIEVE
8241          DR  DL572S
              *

8242          KK  L57L63ROUTE
8243          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8244          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8245          RS       6    FLOW
8246          RC   0.035   0.035   0.035    2225  0.0054    0.00
8247          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8248          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                          HEC-1 INPUT                                          PAGE209

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

8249          KK   CPL63COMBINE
8250          HC       3  10.828
              *

8251          KK  L63L64ROUTE
8252          KM        Cross-section: Cross-section determined from
8253          KM        Camelback CAR model REC-EWP.OUT
8254          KM        dated July 14, 2008, ~RLP9
8255          RS       2    FLOW
8256          RC   0.020   0.020   0.020    4081  0.0038    0.00
8257          RX  100.00  108.00  109.00  110.00  116.00  117.00  118.00  126.00
8258          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

8259          KK     L64BASIN
8260          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
8261          BA   0.196
8262          LG    0.10    0.25    4.50    0.51      84
8263          UI       0     131     393     574     287      89      27       0       0       0
8264          UI       0       0       0       0       0       0       0       0       0       0
8265          UI       0       0       0       0       0       0       0       0       0       0
8266          UI       0       0       0       0       0       0       0       0       0       0
8267          UI       0       0       0       0       0       0       0       0       0       0
              *

8268          KK  DL64REDIVERT
8269          KM        Additional Retention based on 100yr 6hr retention.
8270          KM        C value is based on future land use, P=3.2, A=acres
8271          DT    RL64    21.9     0.0
8272          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8273          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8274          KK   CPL64COMBINE
8275          HC       2  11.024
              *

8276          KK  L64L67ROUTE
8277          KM        Cross-section: Cross-section determined from
8278          KM        Camelback CAR model REC-EWP.OUT
8279          KM        dated July 14, 2008, ~RLP9
8280          RS       1    FLOW
8281          RC   0.020   0.020   0.020    4621  0.0032    0.00
8282          RX  100.00  108.00  109.00  110.00  118.00  119.00  120.00  128.00
8283          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

8284          KK     L67BASIN
8285          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
8286          BA   0.101
8287          LG    0.10    0.25    4.65    0.46      88
8288          UI       0      63     184     293     159      55      17       8       0       0
8289          UI       0       0       0       0       0       0       0       0       0       0
8290          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8291          UI       0       0       0       0       0       0       0       0       0       0
8292          UI       0       0       0       0       0       0       0       0       0       0
              *

8293          KK  DL67REDIVERT
8294          KM        Additional Retention based on 100yr 6hr retention.
8295          KM        C value is based on future land use, P=3.2, A=acres
8296          DT    RL67    10.7     0.0
8297          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8298          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8299          KK   CPL67COMBINE
8300          HC       2  11.125
              *

8301          KK  L67L68ROUTE
8302          KM        Cross-section: Cross-section determined from
8303          KM        Camelback CAR model REC-EWP.OUT
8304          KM        dated July 14, 2008, ~RLP9
8305          RS       1    FLOW
8306          RC   0.020   0.020   0.020     802  0.0032    0.00
8307          RX  100.00  108.00  109.00  110.00  118.00  119.00  120.00  128.00
8308          RY   18.00   10.00   10.00   10.00   10.00   10.00   10.00   18.00
              *

8309          KK     L60BASIN
8310          KM        BASIN BOUNDARY FROM 1990 TOPO
8311          BA   1.004
8312          LG    0.14    0.25    4.00    0.62      64
8313          UI       0     209     772    1165    1923    1571    1025     558     272     139
8314          UI      53      54       0       0       0       0       0       0       0       0
8315          UI       0       0       0       0       0       0       0       0       0       0
8316          UI       0       0       0       0       0       0       0       0       0       0
8317          UI       0       0       0       0       0       0       0       0       0       0
              *

8318          KK  DL60REDIVERT
8319          KM        Additional Retention based on 100yr 2hr retention.
8320          KM        C value is based on future land use, P=2.7, A=acres
8321          DT    RL60    98.2     0.0
8322          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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8323          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8324          KK   DL552RETRIEVE
8325          DR  DL552S
              *

8326          KK  L55L60ROUTE
8327          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8328          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8329          RS      16    FLOW
8330          RC   0.035   0.035   0.035    7477  0.0072    0.00
8331          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8332          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8333          KK   DL561RETRIEVE
8334          DR  DL561S
              *

8335          KK  L56L60ROUTE
8336          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8337          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8338          RS       1    FLOW
8339          RC   0.035   0.035   0.035    5317  0.0049    0.00
8340          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8341          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8342          KK   CPL60COMBINE
8343          HC       3   7.301
              *

8344          KK   DL601DIVERT
8345          KM        Thomas at Citrus split flow
8346          DT  DL601S     0.0     0.0
8347          DI     0.0    67.0   791.7  2066.5  4118.1     0.0     0.0     0.0     0.0     0.0
8348          DQ     0.0    36.8   382.7   978.6  1804.2     0.0     0.0     0.0     0.0     0.0
              *

8349          KK   DL602DIVERT
8350          KM        Thomas at Citrus split flow
8351          DT  DL602S     0.0     0.0
8352          DI     0.0    30.2   409.0  1087.9  2313.9     0.0     0.0     0.0     0.0     0.0
8353          DQ     0.0     8.0    52.7   118.3   199.5     0.0     0.0     0.0     0.0     0.0
              *

8354          KK  L60L61ROUTE
8355          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8356          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8357          RS       7    FLOW
8358          RC   0.035   0.035   0.035    2719  0.0022    0.00
8359          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8360          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8361          KK     L61BASIN
8362          KM        BASIN BOUNDARY FROM 1990 TOPO
8363          BA   0.510
8364          LG    0.10    0.25    4.30    0.58      80
8365          UI       0     174     563     985    1073     644     285     133      43      33
8366          UI       0       0       0       0       0       0       0       0       0       0
8367          UI       0       0       0       0       0       0       0       0       0       0
8368          UI       0       0       0       0       0       0       0       0       0       0
8369          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8370          KK  DL61REDIVERT
8371          KM        Additional Retention based on 100yr 6hr retention.
8372          KM        C value is based on future land use, P=3.2, A=acres
8373          DT    RL61    66.2     0.0
8374          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8375          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8376          KK   DL562RETRIEVE
8377          DR  DL562S
              *

8378          KK  L56L61ROUTE
8379          KM        Cross-section: Ag field, assumed 0.5%
8380          KM        side slopes, V-ditch / Manning's N Value: avg value
8381          KM        for cultivated areas from Estimated Manning's Roughness
8382          KM        Coefficient for Stream Channels and Flood Plains in MC
8383          RS      14    FLOW
8384          RC   0.035   0.035   0.035    5938  0.0056    0.00
8385          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8386          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8387          KK   CPL61COMBINE
8388          HC       3   7.811
              *

8389          KK  DL61SEDIVERT
8390          KM        Thomas at ag road split flow
8391          DT   DL61S     0.0     0.0
8392          DI     0.0   496.7  1797.8  4333.9  7784.2     0.0     0.0     0.0     0.0     0.0
8393          DQ     0.0   322.7  1118.2  2702.6  4870.5     0.0     0.0     0.0     0.0     0.0
              *

8394          KK  L61L62ROUTE
8395          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8396          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8397          RS       9    FLOW
8398          RC   0.035   0.035   0.035    2568  0.0031    0.00
8399          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8400          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8401          KK     L62BASIN
8402          KM        BASIN BOUNDARY FROM 1990 TOPO
```

```
8403          BA   0.494
8404          LG    0.10     0.25     4.55     0.49       79
8405          UI       0      179      578     1022     1009      602      244      117       34       33
8406          UI       0        0        0        0        0        0        0        0        0        0
8407          UI       0        0        0        0        0        0        0        0        0        0
8408          UI       0        0        0        0        0        0        0        0        0        0
8409          UI       0        0        0        0        0        0        0        0        0        0
              *
```



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

8410          KK  DL62REDIVERT
8411          KM        Additional Retention based on 100yr 6hr retention.
8412          KM        C value is based on future land use, P=3.2, A=acres
8413          DT    RL62     64.0      0.0
8414          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8415          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

8416          KK   DL571RETRIEVE
8417          DR  DL571S
              *

8418          KK  L57L62ROUTE
8419          KM        Cross-section: Estimated side slopes and width
8420          KM        based on aerial and topo / Manning's N Value:
8421          KM        natural wash w/ heavy vegetation
8422          RS      14     FLOW
8423          RC   0.045    0.045    0.045     5320   0.0043     0.00
8424          RX  100.00   110.00   120.00   130.00   140.00   150.00   170.00   190.00
8425          RY  1050.5 1050.30 1050.00 1047.00 1047.10 1050.00 1050.30 1050.50
              *

8426          KK   CPL62COMBINE
8427          HC       3   12.304
              *

8428          KK  L62L68ROUTE
8429          KM        Cross-section: Estimated side slopes and width
8430          KM        based on aerial and topo / Manning's N Value:
8431          KM        natural wash w/ heavy vegetation
8432          RS       6     FLOW
8433          RC   0.045    0.045    0.045     5299   0.0045     0.00
8434          RX  100.00   110.00   120.00   130.00   140.00   150.00   170.00   190.00
8435          RY  1050.5 1050.25 1050.00 1047.00 1047.10 1049.00 1050.25 1050.50
              *

8436          KK   DL602RETRIEVE
8437          DR  DL602S
              *

8438          KK  L60L68ROUTE
8439          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8440          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8441          RS      29     FLOW
8442          RC   0.035    0.035    0.035     9173   0.0043     0.00
8443          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
8444          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8445          KK  DL61SERETRIEVE
8446          DR   DL61S
              *

8447          KK  L61L68ROUTE
8448          KM        Cross-section: Assumed 3' depth V-Ditch, width based
8449          KM        aerial / Manning's N Value: clean earth; straight
8450          RS      10     FLOW
8451          RC   0.022    0.022    0.022     7340   0.0044     0.00
8452          RX  100.00   120.00   140.00   148.00   150.00   158.00   178.00   198.00
8453          RY  1040.5 1040.30 1040.00 1037.00 1037.10 1040.00 1040.30 1040.50
              *

8454          KK     L68BASIN
8455          KM        BASIN BOUNDARY FROM L303 AS-BUILT
8456          KM        AND DETAILED L303 1' CI TOPO, DETENTION FACILITY
8457          BA   1.000
8458          LG    0.10     0.25     4.40     0.54       34
8459          UI       0      153      612      926     1388     1738     1163      818      425      237
8460          UI     136       48       46       47        0        0        0        0        0        0
8461          UI       0        0        0        0        0        0        0        0        0        0
8462          UI       0        0        0        0        0        0        0        0        0        0
8463          UI       0        0        0        0        0        0        0        0        0        0
              *

8464          KK  DL68REDIVERT
8465          KM        Additional Retention based on 100yr 2hr retention.
8466          KM        C value is based on future land use, P=2.7, A=acres
8467          DT    RL68     32.9      0.0
8468          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8469          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

8470          KK   CPL68COMBINE
8471          HC       5   14.133
              *

8472          KK     W28BASIN
8473          KM        BASIN BOUNDARY FROM 1990 TOPO, BEAUTIFUL AZ ESTATES
8474          BA   0.350
8475          LG    0.30     0.25     4.30     0.48       16
8476          UI       0       87      306      467      739      510      324      137       78       25
8477          UI      20        0        0        0        0        0        0        0        0        0
8478          UI       0        0        0        0        0        0        0        0        0        0
8479          UI       0        0        0        0        0        0        0        0        0        0
8480          UI       0        0        0        0        0        0        0        0        0        0
              *

8481          KK  DW28REDIVERT
8482          KM        Preliminary Drainage Report for Jackrabbit Estates
8483          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
8484          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
8485          DT    RW28     31.4      0.0
8486          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8487          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8488          KK  W28W29ROUTE
8489          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
8490          KM        width based on aerial / Manning's N Value: earth
8491          KM        w/ sparse trees and shrubs
8492          RS       1    FLOW
8493          RC   0.032   0.032   0.032    6604  0.0035    0.00
8494          RX  100.00  118.00  136.00  144.00  152.00  160.00  180.00  400.00
8495          RY  1148.5 1148.25 1148.00 1146.00 1146.10 1147.00 1147.10 1148.50
              *

8496          KK     W29BASIN
8497          KM        BASIN BOUNDARY FROM 1990 TOPO, JACKRABBIT ESTATES
8498          BA   0.640
8499          LG    0.28    0.25    4.10    0.52      18
8500          UI       0      79     236     412     533     789     915     654     496     353
8501          UI     175     126      79      31      25      24      24       0       0       0
8502          UI       0       0       0       0       0       0       0       0       0       0
8503          UI       0       0       0       0       0       0       0       0       0       0
8504          UI       0       0       0       0       0       0       0       0       0       0
              *

8505          KK  DW29REDIVERT
8506          KM        Preliminary Drainage Report for Jackrabbit Estates
8507          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
8508          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
8509          DT    RW29    46.6     0.0
8510          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8511          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8512          KK   CPW29COMBINE
8513          HC       2    0.99
              *

8514          KK  W29W30ROUTE
8515          KM        Cross-section: Estimated 1.5' deep and 4:1 side slopes
8516          KM        width based on aerial / Manning's N Value: clean straight earth
8517          RS       1    FLOW
8518          RC   0.022   0.022   0.022    2938  0.0068    0.00
8519          RX  100.00  102.00  104.00  116.00  122.00  134.00  144.00  150.00
8520          RY  1117.2 1116.10 1116.00 1114.50 1114.60 1116.00 1116.10 1117.20
              *

8521          KK     W30BASIN
8522          KM
8523          BA   0.266
8524          LG    0.28    0.25    4.30    0.44      14
8525          UI       0      72     250     392     573     376     221      91      47      15
8526          UI      16       0       0       0       0       0       0       0       0       0
8527          UI       0       0       0       0       0       0       0       0       0       0
8528          UI       0       0       0       0       0       0       0       0       0       0
8529          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8530          KK  DW30REDIVERT
8531          KM        Additional Retention based on 100yr 2hr retention.
8532          KM        C value is based on future land use, P=2.7, A=acres
8533          DT    RW30     5.9     0.0
8534          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8535          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8536          KK   CPW30COMBINE
8537          HC       2   1.256
              *

8538          KK  W30L59ROUTE
8539          KM        Cross-section: Width and side slopes based on aerial
8540          KM        and topo / Manning's N Value: earth w/ sparse trees and shrubs
8541          RS       2    FLOW
8542          RC   0.032   0.032   0.032    2996  0.0087    0.00
8543          RX  100.00  115.00  130.00  170.00  194.00  234.00  254.00  274.00
8544          RY  1095.0 1094.50 1094.00 1092.00 1092.10 1094.00 1094.30 1094.50
              *

8545          KK     L59BASIN
8546          KM        BASIN BOUNDARY FROM LITCHFIELD FARMS
8547          BA   0.502
8548          LG    0.30    0.25    4.00    0.47       5
8549          UI       0      65     214     353     463     742     671     490     363     224
8550          UI     113      80      42      20      20      20       0       0       0       0
8551          UI       0       0       0       0       0       0       0       0       0       0
8552          UI       0       0       0       0       0       0       0       0       0       0
8553          UI       0       0       0       0       0       0       0       0       0       0
              *

8554          KK  DL59REDIVERT
8555          KM        Retention volume estimated based on aerial
8556          DT    RL59    37.7     0.0
8557          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8558          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8559          KK   DL551RETRIEVE
8560          DR  DL551S
              *

8561          KK  L55L59ROUTE
8562          KM        Cross-section: Assumed 2' depth, width based on
8563          KM        aerial, wall included / Manning's N Value:
8564          KM        earth w/ sparse trees and brush; street LOB
8565          RS       1    FLOW
8566          RC   0.016   0.032   0.032    5728  0.0038    0.00
8567          RX  100.00  112.00  124.00  132.00  138.00  146.00  148.00  150.00
8568          RY  1104.5 1104.30 1104.00 1102.00 1102.10 1104.00 1104.30 1105.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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8569          KK   CPL59COMBINE
8570          HC       3   2.255
              *

8571          KK  L59L65ROUTE
8572          KM        Cross-section: Assumed 3' depth, width based on aerial
8573          KM        Manning's N Value: earth w/ sparse trees and brush
8574          RS       5    FLOW
8575          RC   0.032   0.032   0.032    6594  0.0067    0.00
8576          RX  100.00  115.00  130.00  146.00  154.00  170.00  190.00  210.00
8577          RY  1074.5 1074.30 1074.00 1071.00 1071.10 1074.00 1074.30 1074.50
              *

8578          KK     W31BASIN
8579          KM         BASIN BOUNDARY FROM 1990 TOPO
8580          BA   0.233
8581          LG    0.30    0.25    4.00    0.50       9
8582          UI       0      49     179     270     446     365     238     129      63      32
8583          UI      13      12       0       0       0       0       0       0       0       0
8584          UI       0       0       0       0       0       0       0       0       0       0
8585          UI       0       0       0       0       0       0       0       0       0       0
8586          UI       0       0       0       0       0       0       0       0       0       0
              *

8587          KK  DW31REDIVERT
8588          KM        Additional Retention based on 100yr 2hr retention.
8589          KM        C value is based on future land use, P=2.7, A=acres
8590          DT    RW31     4.1     0.0
8591          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8592          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8593          KK  W31W32ROUTE
8594          KM        Cross-section: Side slopes and width based
8595          KM        on aerial and topo / Manning's N Value:
8596          KM        earth w/ sparse trees and shrubs
8597          RS       5    FLOW
8598          RC   0.032   0.032   0.032    6659  0.0070    0.00
8599          RX  100.00  115.00  130.00  146.00  162.00  178.00  198.00  218.00
8600          RY  1090.5 1090.30 1090.00 1087.00 1087.10 1090.00 1090.30 1090.50
              *

8601          KK     W32BASIN
8602          KM         BASIN BOUNDARY FROM 1990 TOPO
8603          BA   0.613
8604          LG    0.28    0.25    4.10    0.50      15
8605          UI       0      65     150     297     379     489     709     735     552     431
8606          UI     333     227     113      95      66      28      19      20      20       0
8607          UI       0       0       0       0       0       0       0       0       0       0
8608          UI       0       0       0       0       0       0       0       0       0       0
8609          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8610          KK  DW32REDIVERT
8611          KM        Additional Retention based on 100yr 2hr retention.
8612          KM        C value is based on future land use, P=2.7, A=acres
8613          DT    RW32    12.7     0.0
8614          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8615          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8616          KK   CPW32COMBINE
8617          HC       2   0.846
              *

8618          KK  W32L65ROUTE
8619          KM        Cross-section: Cross-section determined from
8620          KM        EX_SPLIT.DAT model received on May 6, 2009
8621          KM        from PB, 191st Ave to Perryville Road-R10W1
8622          RS       1    FLOW
8623          RC   0.030   0.030   0.030    1714  0.0042    0.00
8624          RX    0.00   34.20   39.20   44.20   49.20   54.20   59.20   93.40
8625          RY  1045.4 1039.70 1039.70 1039.70 1039.70 1039.70 1039.70 1045.40
              *

8626          KK     L65BASIN
8627          KM         BASIN BOUNDARY FROM 1990 TOPO
8628          BA   0.545
8629          LG    0.17    0.25    4.10    0.59      55
8630          UI       0     174     578     987    1163     708     340     153      58      34
8631          UI       0       0       0       0       0       0       0       0       0       0
8632          UI       0       0       0       0       0       0       0       0       0       0
8633          UI       0       0       0       0       0       0       0       0       0       0
8634          UI       0       0       0       0       0       0       0       0       0       0
              *

8635          KK  DL65REDIVERT
8636          KM        Additional Retention based on 100yr 2hr retention.
8637          KM        C value is based on future land use, P=2.7, A=acres
8638          DT    RL65    48.2     0.0
8639          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8640          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8641          KK   CPL65COMBINE
8642          HC       3   3.646
              *

8643          KK  L65L69ROUTE
8644          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
8645          KM        model received on May 6, 2009 from PB,
8646          KM        Perryvile Rd to 185th Ave-R10W2
8647          RS       1    FLOW
8648          RC   0.030   0.030   0.030    1615  0.0042    0.00
8649          RX    0.00   34.20   39.80   44.80   49.80   54.80   59.80   94.60
8650          RY  1045.4 1039.70 1039.70 1039.70 1039.70 1039.70 1039.70 1045.40
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8651          KK     L69BASIN
8652          KM         Boundary based on I-10 W Diversion Channel plan and
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8653          KM        EX.SPLIT.OUT HEC-1 model prepared by PB
8654          BA   0.058
8655          LG    0.14     0.25     4.15     0.60       61
8656          UI       0      106      257       73       11        0        0        0        0        0
8657          UI       0        0        0        0        0        0        0        0        0        0
8658          UI       0        0        0        0        0        0        0        0        0        0
8659          UI       0        0        0        0        0        0        0        0        0        0
8660          UI       0        0        0        0        0        0        0        0        0        0
              *

8661          KK   CPL69COMBINE
8662          HC       2   3.704
              *

8663          KK  L69L70ROUTE
8664          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
8665          KM        model received on May 6, 2009 from PB,
8666          KM        185th Ave to 183rd Ave-R10W3
8667          RS       1    FLOW
8668          RC   0.030   0.030   0.030    1041  0.0036    0.00
8669          RX    0.00   37.80   44.80   51.80   58.80   65.80   72.80  110.60
8670          RY  1021.2 1014.90 1014.90 1014.90 1014.90 1014.90 1017.90 1021.20
              *

8671          KK     L70BASIN
8672          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
8673          BA   0.048
8674          LG    0.14     0.25     4.45     0.50       59
8675          UI       0      124      215       28        0        0        0        0        0        0
8676          UI       0        0        0        0        0        0        0        0        0        0
8677          UI       0        0        0        0        0        0        0        0        0        0
8678          UI       0        0        0        0        0        0        0        0        0        0
8679          UI       0        0        0        0        0        0        0        0        0        0
              *

8680          KK   CPL70COMBINE
8681          HC       2   3.752
              *

8682          KK  L70L71ROUTE
8683          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
8684          KM        model received on May 6, 2009 from PB,
8685          KM        183th Ave to Citrus Rd-R10W4
8686          RS       1    FLOW
8687          RC   0.015   0.015   0.015    2645  0.0036    0.00
8688          RX    0.00   10.00   20.00   32.00   44.00   56.00   66.00   76.00
8689          RY  1021.0 1021.00 1021.00 1015.00 1021.00 1021.00 1021.00 1021.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8690          KK     L66BASIN
8691          KM        BASIN BOUNDARY FROM 1990 TOPO
8692          BA   0.998
8693          LG    0.10     0.25     4.45     0.53       71
8694          UI       0      148      573      864     1263     1738     1205      838      513      251
8695          UI     158       62       45       45        0        0        0        0        0        0
8696          UI       0        0        0        0        0        0        0        0        0        0
8697          UI       0        0        0        0        0        0        0        0        0        0
8698          UI       0        0        0        0        0        0        0        0        0        0
              *

8699          KK  DL66REDIVERT
8700          KM        Additional Retention based on 100yr 2hr retention.
8701          KM        C value is based on future land use, P=2.7, A=acres
8702          DT    RL66     93.8      0.0
8703          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8704          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

8705          KK   DL601RETRIEVE
8706          DR  DL601S
              *

8707          KK  L60L66ROUTE
8708          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8709          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8710          RS       9    FLOW
8711          RC   0.035   0.035   0.035    5281  0.0053    0.00
8712          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8713          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8714          KK   CPL66COMBINE
8715          HC       2   8.299
              *

8716          KK  L66L71ROUTE
8717          KM        Cross-section: assumed 3' depth, width based on aerial
8718          KM        Manning's N Value: clean earth; straight; street LOB
8719          RS       1    FLOW
8720          RC   0.016   0.022   0.022    1163  0.0043    0.00
8721          RX  100.00  108.00  116.00  124.00  130.00  138.00  158.00  178.00
8722          RY  1027.0 1026.10 1026.00 1024.00 1024.40 1026.00 1026.25 1027.00
              *

8723          KK     L71BASIN
8724          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
8725          BA   0.108
8726          LG    0.19     0.25     4.65     0.41       49
8727          UI       0      100      318      285       99       24        0        0        0        0
8728          UI       0        0        0        0        0        0        0        0        0        0
8729          UI       0        0        0        0        0        0        0        0        0        0
8730          UI       0        0        0        0        0        0        0        0        0        0
8731          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8732          KK  DL71REDIVERT
8733          KM        Arizona Storage Preliminary Drainage Report
8734          DT    RL71      1.4      0.0
8735          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8736          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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8737          KK   CPL71COMBINE
8738          HC       3  11.662
              *

8739          KK  L71L72ROUTE
8740          KM        Cross-section: Cross-section determined from EX_SPLIT.DAT
8741          KM        model received on May 6, 2009 from PB,
8742          KM        same x-section as L70L71 no documentation
8743          RS       1    FLOW
8744          RC   0.015   0.015   0.015    5319  0.0036    0.00
8745          RX    0.00   10.00   20.00   32.00   44.00   56.00   66.00   76.00
8746          RY  1021.0 1021.00 1021.00 1015.00 1021.00 1021.00 1021.00 1021.00
              *

8747          KK     L72BASIN
8748          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
8749          KM        DRAINING TO CULVERT UNDER I-10
8750          BA   0.215
8751          LG    0.10    0.25    4.55    0.47      86
8752          UI       0      95     295     531     404     213      76      28      16       0
8753          UI       0       0       0       0       0       0       0       0       0       0
8754          UI       0       0       0       0       0       0       0       0       0       0
8755          UI       0       0       0       0       0       0       0       0       0       0
8756          UI       0       0       0       0       0       0       0       0       0       0
              *

8757          KK  DL72REDIVERT
8758          KM        Retention volume estimated based on aerial
8759          DT    RL72     4.5     0.0
8760          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8761          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8762          KK   CPL72COMBINE
8763          HC       3  18.709
              *

8764          KK   SRL72STORAGE
8765          KM        STORAGE AT NORTHWEST CORNER OF I-10 AND LOOP 303-SRLP12,
8766          KM        EX_SPLIT.DAT MODEL FROM PB, MAY 6, 2009
8767          KO
8768          RS       1    STOR
8769          SV            3.55   24.30   76.37  171.99  295.08  364.38  614.90  927.24 1037.27
8770          SQ            9.50   63.70   82.80  202.10  340.10  384.00  468.90  542.80  565.50
8771          SE  1003.0 1004.00 1006.00 1008.00 1010.00 1012.00 1013.00 1016.00 1019.00 1020.00
8772          ST
              *
1                                          HEC-1 INPUT                                          PAGE222

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

8773          KK  L72RIDROUTE
8774          KM        Cross-section: Cross-section determined from Loop 303 Drainage
8775          KM        Improvements I-10 to Gila River CAR dated Jan 2008, HEC-1 model
8776          KM        Alt_13_Future_Circular_Modified.OH1, RLP12
8777          RS       1    FLOW
8778          RC   0.013   0.013   0.013    1225  0.0043    0.00
8779          RX    0.00   10.80   12.40   14.00   15.60   17.20   18.80   29.60
8780          RY  990.30  984.90  984.90  984.90  984.90  984.90  984.90  990.30
              *

8781          KK  RIDS13ROUTE
8782          KM        Cross-section: Cross-section determined from Loop 303 Drainage
8783          KM        Improvements I-10 to Gila River CAR dated Jan 2008
8784          RS       2    FLOW
8785          RC   0.040   0.040   0.040    3121  0.0047    0.00
8786          RX    0.00   10.00   15.00   20.00   25.00   30.00   35.00   45.00
8787          RY    4.00    2.00    1.00    0.00    0.00    1.00    2.00    4.00
              *

8788          KK     S12BASIN
8789          KM        BASIN BOUNDARY FROM 1990 TOPO, RID
8790          BA   0.203
8791          LG    0.10    0.24    4.80    0.42      55
8792          UI       0     252     762     434      97      24       0       0       0       0
8793          UI       0       0       0       0       0       0       0       0       0       0
8794          UI       0       0       0       0       0       0       0       0       0       0
8795          UI       0       0       0       0       0       0       0       0       0       0
8796          UI       0       0       0       0       0       0       0       0       0       0
              *

8797          KK  DS12REDIVERT
8798          KM        Additional Retention based on 100yr 6hr retention.
8799          KM        C value is based on future land use, P=3.2, A=acres
8800          DT    RS12    10.1     0.0
8801          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8802          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8803          KK   SRS12STORAGE
8804          KM        Storage behind canal (WLB)
8805          KO
8806          RS       1    STOR
8807          SV            3.78    5.29   57.30
8808          SQ                  46.0016968.00
8809          SE  1006.7 1007.80 1008.00 1010.00
8810          ST
              *

8811          KK  S12S13ROUTE
8812          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8813          KM        width based on aerial / Manning's N Value: clean straight earth
8814          RS       3    FLOW
8815          RC   0.022   0.022   0.022    3446  0.0055    0.00
8816          RX  100.00  125.00  150.00  170.00  210.00  270.00  290.00  310.00
1                                          HEC-1 INPUT                                          PAGE223

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

8817          RY  1002.5 1002.30 1002.00  998.00  998.10 1002.00 1002.30 1002.50
              *

8818          KK     S13BASIN
8819          KM        BASIN BOUNDARY FROM COTTON LANE RV & GOLF RESORT MASTER DRAINAGE
8820          KM        REPORT DATED 5/97 BY KAMINSKI HUBBARD ENGINEERING
8821          BA   0.306
8822          LG    0.13    0.25    5.10    0.36      45
8823          UI       0     142     434     782     564     282     102      34      23       0
8824          UI       0       0       0       0       0       0       0       0       0       0
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8825          UI       0       0       0       0       0       0       0       0       0       0
8826          UI       0       0       0       0       0       0       0       0       0       0
8827          UI       0       0       0       0       0       0       0       0       0       0
              *

8828          KK  DS13REDIVERT
8829          KM        Retention volume estimated based on aerial
8830          DT    RS13    26.8     0.0
8831          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8832          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8833          KK   CPS13COMBINE
8834          HC       3  19.218
              *

8835          KK  DS13SEDIVERT
8836          KM        Van Buren at Cotton split flow
8837          DT   DS13S     0.0     0.0
8838          DI     0.0   216.0  1302.0  2400.0     0.0     0.0     0.0     0.0     0.0     0.0
8839          DQ     0.0     0.0  1000.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8840          KK  S13S19ROUTE
8841          KM        Cross-section: Cross-section determined from
8842          KM        Loop 303 Drainage Improvements I-10 to
8843          KM        Gila River CAR dated Jan 2008, HEC-1 model
8844          KM        Alt_13_Future_Circular_Modified.OH1, RLP13
8845          RS       1    FLOW
8846          RC   0.013   0.013   0.013    5108  0.0048    0.00
8847          RX    0.00   10.60   12.20   13.80   15.40   17.00   18.60   29.20
8848          RY  990.20  984.90  984.90  984.90  984.90  984.90  984.90  990.20
              *

8849          KK     S19BASIN
8850          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
8851          KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
8852          KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
8853          BA   0.806
8854          LG    0.22    0.25    4.50    0.44      38
8855          UI       0     113     406     631     875    1359    1006     735     512     239
8856          UI     158      93      34      35      35       0       0       0       0       0
8857          UI       0       0       0       0       0       0       0       0       0       0
8858          UI       0       0       0       0       0       0       0       0       0       0
8859          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE224

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

8860          KK  DS19REDIVERT
8861          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel F
8862          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel B3
8863          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel E
8864          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel H
8865          DT    RS19   104.0     0.0
8866          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8867          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8868          KK   CPS19COMBINE
8869          HC       2  20.024
              *

8870          KK  S19S20ROUTE
8871          KM        Cross-section: Cross-section determined from
8872          KM        Loop 303 Drainage Improvements I-10 to
8873          KM        Gila River CAR dated Jan 2008, HEC-1 model
8874          KM        Alt_13_Future_Circular_Modified.OH1, RLP14
8875          RS       2    FLOW
8876          RC   0.013   0.013   0.013    5288  0.0022    0.00
8877          RX    0.00   15.80   19.00   22.20   25.40   28.60   31.80   47.60
8878          RY  1118.5 1110.60 1110.60 1110.60 1110.60 1110.60 1110.60 1118.50
              *

8879          KK     B95BASIN
8880          KM        BASIN BOUNDARY FROM FIELD VISIT, WALL ON SOUTH BOUNDARY
8881          BA   0.075
8882          LG    0.10    0.25    4.80    0.42      81
8883          UI       0     209     327      39       0       0       0       0       0       0
8884          UI       0       0       0       0       0       0       0       0       0       0
8885          UI       0       0       0       0       0       0       0       0       0       0
8886          UI       0       0       0       0       0       0       0       0       0       0
8887          UI       0       0       0       0       0       0       0       0       0       0
              *

8888          KK  DB95REDIVERT
8889          KM        Additional Retention based on 100yr 6hr retention.
8890          KM        C value is based on future land use, P=3.2, A=acres
8891          DT    RB95     9.3     0.0
8892          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8893          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8894          KK  B95B96ROUTE
8895          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8896          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8897          RS      34    FLOW
8898          RC   0.035   0.035   0.035    8075  0.0020    0.00
8899          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8900          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                          HEC-1 INPUT                                          PAGE225

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

8901          KK     B96BASIN
8902          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8903          KM        BY DEL RIO ENG (2006)
8904          BA   0.692
8905          LG    0.18    0.25    4.70    0.42      27
8906          UI       0     149     543     820    1351    1071     695     365     182      90
8907          UI      37      37       0       0       0       0       0       0       0       0
8908          UI       0       0       0       0       0       0       0       0       0       0
8909          UI       0       0       0       0       0       0       0       0       0       0
8910          UI       0       0       0       0       0       0       0       0       0       0
              *
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8911          KK  DB96REDIVERT
8912          KM        Retention volume estimated based on aerial
8913          DT    RB96    34.8     0.0
8914          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8915          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8916          KK   CPB96COMBINE
8917          HC       2   0.767
              *

8918          KK  B96B97ROUTE
8919          KM        Cross-section: estimated from aerial and topo
8920          KM        V-ditch / Manning's N Value: grass - golf course
8921          RS       8    FLOW
8922          RC   0.025   0.025   0.025    6205  0.0020    0.00
8923          RX  100.00  145.00  190.00  240.00  340.00  390.00  435.00  455.00
8924          RY  1018.0 1017.80 1017.50 1015.00 1015.50 1017.50 1017.80 1018.00
              *

8925          KK     B97BASIN
8926          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8927          KM        BY DEL RIO ENG (2006)
8928          BA   0.931
8929          LG    0.23    0.25    4.70    0.39      25
8930          UI       0     112     321     561     736    1053    1333     972     748     549
8931          UI     309     192     125      72      35      35      34       0       0       0
8932          UI       0       0       0       0       0       0       0       0       0       0
8933          UI       0       0       0       0       0       0       0       0       0       0
8934          UI       0       0       0       0       0       0       0       0       0       0
              *

8935          KK   CPB97COMBINE
8936          HC       2   1.698
              *

8937          KK  DB97REDIVERT
8938          KM        Pebblecreek Phase II Master Drainage Report (west half)
8939          DT    RB97    94.0     0.0
8940          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8941          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE226

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

8942          KK   SRB97STORAGE
8943          KM        Storage per Palm Valley Phase 8 basin
8944          KO
8945          RS       1    STOR
8946          SV           15.40   58.50   67.00
8947          SQ           10.00   55.00 1000.00
8948          SE  1001.0 1003.00 1009.00 1010.00
8949          ST
              *

8950          KK  DB97SEDIVERT
8951          KM        Split flow: bleed pipe from basin to south, overflow will pond at RID th
8952          DT   DD97S     0.0     0.0
8953          DI     0.0     3.6     9.8    11.5    13.3    14.8    16.2  5000.0     0.0     0.0
8954          DQ     0.0     3.6     9.8    11.5    13.3    14.8    16.2    16.2     0.0     0.0
              *

8955          KK  B97B99ROUTE
8956          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8957          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8958          RS       1    FLOW
8959          RC   0.035   0.035   0.035    3043  0.0001    0.00
8960          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8961          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8962          KK     B99BASIN
8963          KM        BASIN BOUNDARY FROM RID, 1990 TOPO
8964          BA   0.158
8965          LG    0.10    0.24    4.60    0.49      52
8966          UI       0     188     577     351      84      19       0       0       0       0
8967          UI       0       0       0       0       0       0       0       0       0       0
8968          UI       0       0       0       0       0       0       0       0       0       0
8969          UI       0       0       0       0       0       0       0       0       0       0
8970          UI       0       0       0       0       0       0       0       0       0       0
              *

8971          KK  DB99REDIVERT
8972          KM        Additional Retention based on 100yr 6hr retention.
8973          KM        C value is based on future land use, P=3.2, A=acres
8974          DT    RB99     8.8     0.0
8975          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8976          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8977          KK   CPB99COMBINE
8978          HC       2   1.856
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8979          KK  B99S11ROUTE
8980          KM        Cross-section: Cross-section determined from
8981          KM        aerial and 1991 topo / Manning's N Value: earth
8982          KM        w/ sparse trees and brush
8983          RS       1    FLOW
8984          RC   0.032   0.032   0.032     382  0.0001    0.00
8985          RX  100.00  102.00  104.00  134.00  224.00  274.00  276.00  278.00
8986          RY  1020.2 1020.10 1020.00 1008.00 1008.10 1020.00 1020.10 1020.20
              *

8987          KK     S11BASIN
8988          KM        BASIN BOUNDARY FROM 1990 TOPO, RID
8989          BA   0.064
8990          LG    0.09    0.23    4.60    0.46      79
8991          UI       0      66     212     158      45      11       0       0       0       0
8992          UI       0       0       0       0       0       0       0       0       0       0
8993          UI       0       0       0       0       0       0       0       0       0       0
8994          UI       0       0       0       0       0       0       0       0       0       0
8995          UI       0       0       0       0       0       0       0       0       0       0
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8996          KK  DS11REDIVERT
8997          KM        Additional Retention based on 100yr 6hr retention.
8998          KM        C value is based on future land use, P=3.2, A=acres
8999          DT    RS11      5.1      0.0
9000          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
9001          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

9002          KK   CPS11COMBINE
9003          HC       2     1.92
              *

9004          KK   SRS11STORAGE
9005          KM        Storage behind canal
9006          KO
9007          RS       1     STOR
9008          SV            6.24    21.77    28.91
9009          SQ                            726.00
9010          SE  1007.4 1008.00 1008.70 1009.00
9011          ST
              *

9012          KK  S11S14ROUTE
9013          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9014          KM        width based on aerial / Manning's N Value: clean straight earth
9015          RS       1     FLOW
9016          RC   0.022    0.022    0.022     4396  0.0036     0.00
9017          RX  100.00   105.00   110.00   122.00  172.00   184.00   189.00   194.00
9018          RY  1004.5 1004.30 1004.00 1001.00 1001.10 1004.00 1004.30 1004.50
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9019          KK     S14BASIN
9020          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
9021          KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
9022          KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
9023          KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
9024          BA   0.361
9025          LG    0.23     0.25     4.70     0.39       42
9026          UI       0      160      503      903      670      352      126       44       27        0
9027          UI       0        0        0        0        0        0        0        0        0        0
9028          UI       0        0        0        0        0        0        0        0        0        0
9029          UI       0        0        0        0        0        0        0        0        0        0
9030          UI       0        0        0        0        0        0        0        0        0        0
              *

9031          KK  DS14REDIVERT
9032          KM        Final Drainage Report for Glen River at Canyon Trails Parcel 3L
9033          KM        Final Drainage Report for Canyon Trails Court Homes
9034          KM        Remaining retention volume estimated from aerial
9035          DT    RS14     37.5      0.0
9036          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
9037          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

9038          KK  CPS14ACOMBINE
9039          HC       2    2.281
              *

9040          KK  DS13SERETRIEVE
9041          DR   DS13S
              *

9042          KK  S13S14ROUTE
9043          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9044          KM        width based on aerial / Manning's N Value: clean straight earth
9045          RS       1     FLOW
9046          RC   0.022    0.022    0.022      995  0.0010     0.00
9047          RX  100.00   104.00   108.00   112.00  137.00   141.00   145.00   149.00
9048          RY  983.00   982.00   981.00   980.00  979.90   981.00   982.00   983.00
              *

9049          KK  CPS14BCOMBINE
9050          HC       2   21.499
              *

9051          KK  S14S16ROUTE
9052          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9053          KM        width based on aerial / Manning's N Value: grass
9054          RS       1     FLOW
9055          RC   0.025    0.025    0.025     5363  0.0041     0.00
9056          RX  100.00   112.00   124.00   136.00  186.00   198.00   208.00   218.00
9057          RY  982.50   982.30   982.00   979.00  979.10   982.00   982.30   982.50
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9058          KK     B98BASIN
9059          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
9060          KM        BY DEL RIO ENG (2006)
9061          BA   0.267
9062          LG    0.25     0.25     4.70     0.36       30
9063          UI       0      102      327      588      534      310      118       51       19       19
9064          UI       0        0        0        0        0        0        0        0        0        0
9065          UI       0        0        0        0        0        0        0        0        0        0
9066          UI       0        0        0        0        0        0        0        0        0        0
9067          UI       0        0        0        0        0        0        0        0        0        0
              *

9068          KK  DB98REDIVERT
9069          KM        Retention volume estimated based on aerial
9070          DT    RB98     26.1      0.0
9071          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
9072          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

9073          KK  B98100ROUTE
9074          KM        Cross-section: Estimated based on aerial
9075          KM        Manning's N Value: street and ROW
9076          RS       1     FLOW
9077          RC   0.022    0.016    0.022     1163  0.0050     0.00
9078          RX  100.00   120.00   140.00   142.00  162.00   164.00   184.00   204.00
9079          RY  1002.5 1002.30 1002.00 1001.50 1001.40 1001.90 1002.20 1002.50
              *
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9080          KK    B100BASIN
9081          KM        BASIN BOUNDARY RID AND PALM VALLEY, 1990 TOPO
9082          BA   0.120
9083          LG    0.10     0.25     5.20     0.36       72
9084          UI       0      465      427        0        0        0        0        0        0        0
9085          UI       0        0        0        0        0        0        0        0        0        0
9086          UI       0        0        0        0        0        0        0        0        0        0
9087          UI       0        0        0        0        0        0        0        0        0        0
9088          UI       0        0        0        0        0        0        0        0        0        0
              *

9089          KK  DB97SERETRIEVE
9090          DR   DD97S
              *

9091          KK  CPB100COMBINE
9092          HC       3   2.085
              *

9093          KK   B100SROUTE
9094          KM        Cross-section: Cross-section determined from
9095          KM        aerial and 1991 topo / Manning's N Value: grass
9096          RS       1    FLOW
9097          RC   0.032   0.016   0.032    4838  0.0025     0.00
9098          RX  100.00  112.00  124.00  136.00  176.00  188.00  200.00  212.00
9099          RY  998.50  998.30  998.00  995.00  995.10  998.00  998.30  998.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9100          KK     S15BASIN
9101          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
9102          KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
9103          KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
9104          KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
9105          BA   0.482
9106          LG    0.24     0.25     4.65     0.38       32
9107          UI       0      154      503      851     1039      628      313      137       53       31
9108          UI       0        0        0        0        0        0        0        0        0        0
9109          UI       0        0        0        0        0        0        0        0        0        0
9110          UI       0        0        0        0        0        0        0        0        0        0
9111          UI       0        0        0        0        0        0        0        0        0        0
              *

9112          KK  DS15REDIVERT
9113          KM        Final Drainage Report for Broadstone at Canyon Trails
9114          KM        Drainage Report for The Rock of Refuge Church
9115          KM        Remaining retention volume estimated from aerial
9116          DT    RS15     34.5      0.0
9117          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
9118          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

9119          KK   CPS15COMBINE
9120          HC       2   2.567
              *

9121          KK  S15S16ROUTE
9122          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9123          KM        width based on aerial / Manning's N Value: grass
9124          RS       6    FLOW
9125          RC   0.025   0.025   0.025    6178  0.0029     0.00
9126          RX  100.00  108.00  116.00  128.00  178.00  190.00  202.00  222.00
9127          RY  977.50  977.30  977.00  975.00  975.10  977.00  977.30  977.50
              *

9128          KK     S16BASIN
9129          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT
9130          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
9131          BA   0.683
9132          LG    0.23     0.25     5.20     0.31       32
9133          UI       0       82      235      412      540      773      978      712      549      403
9134          UI     227      141       92       52       26       25       25        0        0        0
9135          UI       0        0        0        0        0        0        0        0        0        0
9136          UI       0        0        0        0        0        0        0        0        0        0
9137          UI       0        0        0        0        0        0        0        0        0        0
              *

9138          KK  DS16REDIVERT
9139          KM        Final Drainage Report for Canyon Trails Unit 3 Infrastructure
9140          KM        Final Drainage Report for Curtis Commons
9141          KM        Remaining retention volume estimated from aerial
9142          DT    RS16     72.5      0.0
9143          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1                                          HEC-1 INPUT                                                PAGE231

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

9144          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

9145          KK   CPS16COMBINE
9146          HC       3  23.051
              *

9147          KK  S16S18ROUTE
9148          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9149          KM        width based on aerial / Manning's N Value: clean straight earth
9150          RS       6    FLOW
9151          RC   0.022   0.022   0.022    6594  0.0039     0.00
9152          RX  100.00  112.00  124.00  136.00  176.00  188.00  208.00  228.00
9153          RY  956.50  956.30  956.00  953.00  953.10  956.00  956.30  956.50
              *

9154          KK     S17BASIN
9155          KM        BASIN BOUNDARY FROM 1990 TOPO AND FINAL DRAINAGE REPORT
9156          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
9157          BA   0.260
9158          LG    0.15     0.25     5.80     0.25       63
9159          UI       0      143      421      725      447      178       64       20        0        0
9160          UI       0        0        0        0        0        0        0        0        0        0
9161          UI       0        0        0        0        0        0        0        0        0        0
9162          UI       0        0        0        0        0        0        0        0        0        0
9163          UI       0        0        0        0        0        0        0        0        0        0
              *

9164          KK  DS17REDIVERT
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9165          KM        Additional Retention based on 100yr 6hr retention.
9166          KM        C value is based on future land use, P=3.2, A=acres
9167          DT    RS17    29.7     0.0
9168          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9169          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9170          KK  S17S18ROUTE
9171          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9172          KM        width based on aerial / Manning's N Value: clean straight earth
9173          RS      15    FLOW
9174          RC   0.022   0.022   0.022    5337  0.0049    0.00
9175          RX  100.00  120.00  140.00  156.00  186.00  202.00  222.00  242.00
9176          RY  952.50  952.30  952.00  950.00  949.90  952.00  952.30  952.50
              *

9177          KK     S18BASIN
9178          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4
9179          KM        SOUTH INFRASTRUCTURE DATED 2/8/05 BY CVL AND MASTER DRAINAGE REPORT
9180          KM        FOR CANYON TRAILS DATED 11/12/99 BY CVL. AT THE OUTLET OF THIS BASIN
9181          KM        THERE IS A CULVERT UNDER LOWER BUCKEYE ROAD THAT DOES NOT GO
9182          KM        UNDER THE ROAD.  THE WATER WILL POND UP AND SPILL OVER LOWER
9183          KM        BUCKEYE ROAD.
9184          BA   0.740
9185          LG    0.25    0.25    4.90    0.32      22
9186          UI       0      88     240     432     562     779    1056     784     611     453
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9187          UI     282     153     111      72      27      27      27      27       0       0
9188          UI       0       0       0       0       0       0       0       0       0       0
9189          UI       0       0       0       0       0       0       0       0       0       0
9190          UI       0       0       0       0       0       0       0       0       0       0
              *

9191          KK  DS18REDIVERT
9192          KM        Final Drainage Report for Canyon Trails Unit 4 South I
9193          KM        Infrastructure, Final Drainage Report for Canyon Trails Unit 4
9194          KM        South Parcel B, Final Drainage Report for Canyon Trails
9195          KM        Unit 4 South Parcel A, Final Drainage Report for
9196          KM        Canyon Trails Unit 4 South Parcels C & G, Final Drainage Report for
9197          KM        Canyon Trails Unit 4 South Parcel D, E and F, Drainage Report for Aldea
9198          DT    RS18    68.0     0.0
9199          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9200          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9201          KK   CPS18COMBINE
9202          HC       3  24.051
              *

9203          KK     S20BASIN
9204          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR UNITS I, II, & III
9205          KM        COTTONFLOWER COMMUNITY DATED 8/24/99 BY AMERICAN ENGINEERING COMPANY
9206          BA   0.608
9207          LG    0.24    0.25    4.65    0.39      34
9208          UI       0      80     267     431     579     927     800     588     433     253
9209          UI     137      90      45      24      25      25       0       0       0       0
9210          UI       0       0       0       0       0       0       0       0       0       0
9211          UI       0       0       0       0       0       0       0       0       0       0
9212          UI       0       0       0       0       0       0       0       0       0       0
              *

9213          KK  DS20REDIVERT
9214          KM        Final Drainage Report for Units I, II, & III - Cottonflower
9215          KM        Community, Final Drainage Report for Sin Lomas
9216          DT    RS20    45.7     0.0
9217          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9218          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9219          KK   CPS20COMBINE
9220          HC       3  25.465
              *

9221          KK  S20S26ROUTE
9222          KM        Cross-section: Cross-section determined from
9223          KM        Loop 303 Drainage Improvements I-10 to
9224          KM        Gila River CAR dated Jan 2008, HEC-1
9225          KM        Alt_13_Future_Circular_Modified.OH1, RLP15
9226          RS       1    FLOW
9227          RC   0.013   0.013   0.013    4273  0.0056    0.00
9228          RX    0.00   11.00   12.60   14.20   15.80   17.40   19.00   30.00
9229          RY  925.00  919.50  919.50  919.50  919.50  919.50  919.50  925.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9230          KK     S26BASIN
9231          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9232          BA   0.187
9233          LG    0.24    0.25    4.50    0.43      33
9234          UI       0      70     223     402     377     221      87      41      13      12
9235          UI       0       0       0       0       0       0       0       0       0       0
9236          UI       0       0       0       0       0       0       0       0       0       0
9237          UI       0       0       0       0       0       0       0       0       0       0
9238          UI       0       0       0       0       0       0       0       0       0       0
              *

9239          KK  DS26REDIVERT
9240          KM        Retention volume estimated based on aerial
9241          DT    RS26    25.8     0.0
9242          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9243          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9244          KK   CPS26COMBINE
9245          HC       2  25.652
              *

9246          KK  S26S31ROUTE
9247          KM        Cross-section: Cross-section determined from Loop 303 Drainage
9248          KM        Improvements I-10 to Gila River CAR dated Jan 2008,
9249          KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1,
9250          KM        used same x-section as RLP15
9251          RS       1    FLOW
9252          RC   0.013   0.013   0.013    3661  0.0056    0.00
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9253          RX    0.00   11.00   12.60   14.20   15.80   17.40   19.00   30.00
9254          RY  925.00  919.50  919.50  919.50  919.50  919.50  919.50  925.00
              *

9255          KK    S26ABASIN
9256          KM        Boundary based on L303 Drainage Improvement I-10
9257          KM        to Gila River CAR dated Jan 2008 prepared by PEC
9258          BA   0.275
9259          LG    0.12    0.25    4.65    0.45      65
9260          UI       0     225     712     767     303      87      27       0       0       0
9261          UI       0       0       0       0       0       0       0       0       0       0
9262          UI       0       0       0       0       0       0       0       0       0       0
9263          UI       0       0       0       0       0       0       0       0       0       0
9264          UI       0       0       0       0       0       0       0       0       0       0
              *

9265          KK  DS26ARDIVERT
9266          KM        Retention volume estimated based on aerial
9267          DT   RS26A    23.5     0.0
9268          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9269          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


9270          KK  DS21SERETRIEVE
9271          DR   DS21S
              *

9272          KK  S2126AROUTE
9273          KM        Cross-section: Side slopes and width based on aerial and topo
9274          KM        Manning's N Value: earth w/ sparse trees and shrubs, parking lot ROB
9275          RS      19    FLOW
9276          RC   0.032   0.032   0.016    3015  0.0017    0.00
9277          RX  100.00  105.00  110.00  200.00  287.00  334.00  734.00  735.00
9278          RY  912.00  911.00  910.00  906.00  906.10  910.00  911.90  912.00
              *

9279          KK  CPS26ACOMBINE
9280          HC       2   0.401
              *

9281          KK  DS26SEDIVERT
9282          KM        175th alignment at RR tracks split flow
9283          DT   DS26S     0.0     0.0
9284          DI     0.0    37.5   197.1   950.1  2315.7     0.0     0.0     0.0     0.0     0.0
9285          DQ     0.0     0.0     0.0   231.5   781.2     0.0     0.0     0.0     0.0     0.0
              *

9286          KK  26A31AROUTE
9287          KM        Cross-section: Based on aerial and topo
9288          KM        Manning's N Value: clean earth; straight;
9289          KM        earth w/ sparse trees and shrubs LOB and ROB
9290          RS       6    FLOW
9291          RC   0.035   0.022   0.035    2621  0.0031    0.00
9292          RX  100.00  110.00  120.00  130.00  295.00  575.00  585.00  595.00
9293          RY  906.00  905.50  905.00  904.00  904.10  905.80  905.90  906.00
              *

9294          KK     S28BASIN
9295          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
9296          KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
9297          KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
9298          BA   0.136
9299          LG    0.23    0.25    4.45    0.45      31
9300          UI       0     190     542     256      50       0       0       0       0       0
9301          UI       0       0       0       0       0       0       0       0       0       0
9302          UI       0       0       0       0       0       0       0       0       0       0
9303          UI       0       0       0       0       0       0       0       0       0       0
9304          UI       0       0       0       0       0       0       0       0       0       0
              *

9305          KK  DS28REDIVERT
9306          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel G
9307          DT    RS28    21.1     0.0
9308          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9309          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


9310          KK  S28S29ROUTE
9311          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
9312          KM        width based on aerial / Manning's N Value: clean straight earth
9313          RS       1    FLOW
9314          RC   0.022   0.022   0.022    5299  0.0070    0.00
9315          RX  100.00  140.00  180.00  192.00  193.00  205.00  225.00  245.00
9316          RY  958.50  958.30  958.00  956.00  956.10  958.00  958.10  958.20
              *

9317          KK     S29BASIN
9318          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9319          BA   0.623
9320          LG    0.26    0.25    4.65    0.38      18
9321          UI       0     100     401     600     925    1072     714     484     235     137
9322          UI      71      30      30       0       0       0       0       0       0       0
9323          UI       0       0       0       0       0       0       0       0       0       0
9324          UI       0       0       0       0       0       0       0       0       0       0
9325          UI       0       0       0       0       0       0       0       0       0       0
              *

9326          KK  DS29REDIVERT
9327          KM        Additional Retention based on 100yr 6hr retention.
9328          KM        C value is based on future land use, P=3.2, A=acres
9329          DT    RS29    29.1     0.0
9330          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9331          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9332          KK   CPS29COMBINE
9333          HC       2   0.759
              *

9334          KK  S29S30ROUTE
9335          KM        Cross-section: Estimated 2' deep and 4:1 side
9336          KM        slopes, width based on aerial / Manning's N
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9337          KM        Value: clean straight earth, street LOB
9338          RS       3    FLOW
9339          RC   0.016   0.022   0.022    5305  0.0066    0.00
9340          RX  100.00  120.00  140.00  152.00  156.00  168.00  208.00  248.00
9341          RY  932.50  932.30  932.00  930.00  930.10  932.00  932.30  932.50
              *

9342          KK     S30BASIN
9343          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9344          BA   0.465
9345          LG    0.25    0.25    4.60    0.39      25
9346          UI       0      90     337     509     840     745     494     300     134      80
9347          UI      24      24      24       0       0       0       0       0       0       0
9348          UI       0       0       0       0       0       0       0       0       0       0
9349          UI       0       0       0       0       0       0       0       0       0       0
9350          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9351          KK  DS30REDIVERT
9352          KM        Additional Retention based on 100yr 6hr retention.
9353          KM        C value is based on future land use, P=3.2, A=acres
9354          DT    RS30    36.1     0.0
9355          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9356          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9357          KK   CPS30COMBINE
9358          HC       2   1.224
              *

9359          KK  S30S32ROUTE
9360          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9361          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9362          RS       1    FLOW
9363          RC   0.035   0.035   0.035    1375  0.0015    0.00
9364          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9365          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9366          KK     S32BASIN
9367          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9368          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
9369          BA   0.147
9370          LG    0.15    0.25    4.80    0.39      41
9371          UI       0      50     163     283     310     185      83      38      12       9
9372          UI       0       0       0       0       0       0       0       0       0       0
9373          UI       0       0       0       0       0       0       0       0       0       0
9374          UI       0       0       0       0       0       0       0       0       0       0
9375          UI       0       0       0       0       0       0       0       0       0       0
              *

9376          KK  DS32REDIVERT
9377          KM        Additional Retention based on 100yr 2hr retention.
9378          KM        C value is based on future land use, P=2.7, A=acres
9379          DT    RS32    11.2     0.0
9380          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9381          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9382          KK   CPS32COMBINE
9383          HC       2   1.371
              *

9384          KK    S31ABASIN
9385          KM        Boundary based on L303 Drainage Improvement I-10
9386          KM        to Gila River CAR dated Jan 2008 prepared by PEC
9387          BA   0.090
9388          LG    0.11    0.25    4.65    0.45      66
9389          UI       0     139     381     146      24       0       0       0       0       0
9390          UI       0       0       0       0       0       0       0       0       0       0
9391          UI       0       0       0       0       0       0       0       0       0       0
9392          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE237

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

9393          UI       0       0       0       0       0       0       0       0       0       0
              *

9394          KK  DS31ARDIVERT
9395          KM        Additional Retention based on 100yr 6hr retention.
9396          KM        C value is based on future land use, P=3.2, A=acres
9397          DT   RS31A    11.6     0.0
9398          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9399          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9400          KK     S31BASIN
9401          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9402          BA   0.459
9403          LG    0.23    0.25    4.60    0.40      29
9404          UI       0      82     316     476     773     749     509     324     146      89
9405          UI      36      23      23       0       0       0       0       0       0       0
9406          UI       0       0       0       0       0       0       0       0       0       0
9407          UI       0       0       0       0       0       0       0       0       0       0
9408          UI       0       0       0       0       0       0       0       0       0       0
              *

9409          KK  DS31REDIVERT
9410          KM        Additional Retention based on 100yr 6hr retention.
9411          KM        C value is based on future land use, P=3.2, A=acres
9412          DT    RS31    38.3     0.0
9413          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9414          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9415          KK   CPS31COMBINE
9416          HC       5  27.973
              *

9417          KK   SRS31STORAGE
9418          KM        PONDING BEHIND SPRR AT 177TH AVE, SR359,
9419          KM        HEC-1 MODEL: ALT_13_FUTURE_CIRCULAR_MODIFIED.OH1
9420          KM        DATED JAN 18, 2008
9421          KO
9422          RS       1    STOR
```

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9423          SV           0.10    5.90   19.10   33.60   49.20  142.20  163.50  184.70
9424          SQ          59.00   98.00  129.00  158.00  200.00  450.00 1135.00 1270.00
9425          SE  891.30  893.00  894.00  895.00  896.00  897.00  902.00  903.00  904.00
9426          ST
              *

9427          KK  S31S27ROUTE
9428          KM        Cross-section: Cross-section determined from Loop 303 Drainage
9429          KM        Improvements I-10 to Gila River CAR dated Jan 2008,
9430          KM        HEC-1 model Alt_13_Future_Circular_Modified.OH1, R359
9431          RS       7    FLOW
9432          RC   0.075   0.075   0.075    1409  0.0020    0.00
9433          RX  1000.0 1001.00 1002.00 1220.00 2380.00 2758.00 2759.00 2760.00
9434          RY  900.00  897.00  897.00  896.00  896.00  897.00  897.00  900.00
              *
1                                          HEC-1 INPUT                                          PAGE238

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

9435          KK     S27BASIN
9436          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9437          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
9438          BA   0.116
9439          LG    0.10    0.25    5.40    0.32      69
9440          UI       0     240     522     119       0       0       0       0       0       0
9441          UI       0       0       0       0       0       0       0       0       0       0
9442          UI       0       0       0       0       0       0       0       0       0       0
9443          UI       0       0       0       0       0       0       0       0       0       0
9444          UI       0       0       0       0       0       0       0       0       0       0
              *

9445          KK  DS27REDIVERT
9446          KM        Additional Retention based on 100yr 6hr retention.
9447          KM        C value is based on future land use, P=3.2, A=acres
9448          DT    RS27    13.8     0.0
9449          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9450          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9451          KK  DS26SERETRIEVE
9452          DR   DS26S
              *

9453          KK  S26A27ROUTE
9454          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
9455          KM        Manning's N Value: avg value for cultivated areas from Estimated
9456          KM        Manning's Roughness Coefficient for Stream Channels and Flood Plains in
9457          RS       1    FLOW
9458          RC   0.038   0.038   0.038    1674  0.0011    0.00
9459          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9460          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9461          KK   CPS27COMBINE
9462          HC       3  28.089
              *

9463          KK  S27S82ROUTE
9464          KM        Cross-section: Cross-section determined from Loop 303 Drainage
9465          KM        Improvements I-10 to Gila River CAR dated Jan 2008
9466          RS       1    FLOW
9467          RC   0.040   0.040   0.040    1040  0.0004    0.00
9468          RX    0.00   10.00   15.00   20.00   55.00   60.00   65.00   75.00
9469          RY    4.00    2.00    1.00    0.00    0.00    1.00    2.00    4.00
              *

9470          KK     S82BASIN
9471          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9472          KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
9473          BA   0.174
9474          LG    0.21    0.25    6.00    0.22      55
9475          UI       0     108     323     508     272      90      28      15       0       0
9476          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE239

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

9477          UI       0       0       0       0       0       0       0       0       0       0
9478          UI       0       0       0       0       0       0       0       0       0       0
9479          UI       0       0       0       0       0       0       0       0       0       0
              *

9480          KK  DS82REDIVERT
9481          KM        Additional Retention based on 100yr 6hr retention.
9482          KM        C value is based on future land use, P=3.2, A=acres
9483          DT    RS82    22.0     0.0
9484          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9485          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9486          KK   CPS82COMBINE
9487          HC       2  28.263
              *

9488          KK  S8281AROUTE
9489          KM        Cross-section: Cross-section determined from Loop 303 Drainage
9490          KM        Improvements I-10 to Gila River CAR dated Jan 2008
9491          RS       1    FLOW
9492          RC   0.040   0.040   0.040    1073  0.0004    0.00
9493          RX    0.00   10.00   15.00   20.00   55.00   60.00   65.00   75.00
9494          RY    4.00    2.00    1.00    0.00    0.00    1.00    2.00    4.00
              *

9495          KK    S81ABASIN
9496          KM        Boundary based on L303 Drainage Improvement I-10
9497          KM        to Gila River CAR dated Jan 2008 prepared by PEC
9498          BA   0.039
9499          LG    0.25    0.25    5.80    0.22      43
9500          UI       0     101     174      23       0       0       0       0       0       0
9501          UI       0       0       0       0       0       0       0       0       0       0
9502          UI       0       0       0       0       0       0       0       0       0       0
9503          UI       0       0       0       0       0       0       0       0       0       0
9504          UI       0       0       0       0       0       0       0       0       0       0
              *

9505          KK  DS81ARDIVERT
9506          KM        Additional Retention based on 100yr 6hr retention.
9507          KM        C value is based on future land use, P=3.2, A=acres
9508          DT   RS81A     4.8     0.0
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9509          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9510          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9511          KK  CPS81ACOMBINE
9512          HC       2  28.302
              *
1                                          HEC-1 INPUT                                          PAGE240

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

9513          KK  S81A25ROUTE
9514          KM        Cross-section: Cross-section determined from Loop 303 Drainage
9515          KM        Improvements I-10 to Gila River CAR dated Jan 2008
9516          RS       1    FLOW
9517          RC   0.040   0.040   0.040    1229  0.0004    0.00
9518          RX    0.00   10.00   15.00   20.00   55.00   60.00   65.00   75.00
9519          RY    4.00    2.00    1.00    0.00    0.00    1.00    2.00    4.00
              *

9520          KK     S25BASIN
9521          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9522          BA   0.591
9523          LG    0.23    0.23    6.20    0.20      45
9524          UI       0     120     449     672    1113     923     613     349     165      87
9525          UI      31      31       0       0       0       0       0       0       0       0
9526          UI       0       0       0       0       0       0       0       0       0       0
9527          UI       0       0       0       0       0       0       0       0       0       0
9528          UI       0       0       0       0       0       0       0       0       0       0
              *

9529          KK  DS25REDIVERT
9530          KM        Additional Retention based on 100yr 6hr retention.
9531          KM        C value is based on future land use, P=3.2, A=acres
9532          DT    RS25    67.9     0.0
9533          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9534          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9535          KK   CPS25COMBINE
9536          HC       3  35.253
              *

9537          KK     S81BASIN
9538          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9539          BA   0.092
9540          LG    0.25    0.21    6.40    0.18      29
9541          UI       0      90     290     233      74      17       0       0       0       0
9542          UI       0       0       0       0       0       0       0       0       0       0
9543          UI       0       0       0       0       0       0       0       0       0       0
9544          UI       0       0       0       0       0       0       0       0       0       0
9545          UI       0       0       0       0       0       0       0       0       0       0
              *

9546          KK  DS81REDIVERT
9547          KM        Additional Retention based on 100yr 6hr retention.
9548          KM        C value is based on future land use, P=3.2, A=acres
9549          DT    RS81     8.3     0.0
9550          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9551          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE241

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

9552          KK    S82ABASIN
9553          KM        Boundary based on L303 Drainage Improvement I-10
9554          KM        to Gila River CAR dated Jan 2008 prepared by PEC
9555          BA   0.030
9556          LG    0.25    0.10   11.20    0.03      40
9557          UI       0      91     126      14       0       0       0       0       0       0
9558          UI       0       0       0       0       0       0       0       0       0       0
9559          UI       0       0       0       0       0       0       0       0       0       0
9560          UI       0       0       0       0       0       0       0       0       0       0
9561          UI       0       0       0       0       0       0       0       0       0       0
              *

9562          KK  DS82ARDIVERT
9563          KM        Additional Retention based on 100yr 6hr retention.
9564          KM        C value is based on future land use, P=3.2, A=acres
9565          DT   RS82A     3.5     0.0
9566          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9567          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9568          KK  S82A83ROUTE
9569          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9570          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9571          RS      46    FLOW
9572          RC   0.035   0.035   0.035    6889  0.0008    0.00
9573          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9574          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9575          KK     S83BASIN
9576          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS
9577          KM        BEHIND EXTENSION CANAL, OVERTOPS AND ENTERS GILA RIVER
9578          BA   0.215
9579          LG    0.23    0.25    5.60    0.25      31
9580          UI       0      24      60     111     146     189     286     242     188     142
9581          UI     107      57      40      27      16       8       7       7       7       0
9582          UI       0       0       0       0       0       0       0       0       0       0
9583          UI       0       0       0       0       0       0       0       0       0       0
9584          UI       0       0       0       0       0       0       0       0       0       0
              *

9585          KK  DS83REDIVERT
9586          KM        Additional Retention based on 100yr 2hr retention.
9587          KM        C value is based on future land use, P=2.7, A=acres
9588          DT    RS83    10.7     0.0
9589          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9590          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE242

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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9591          KK   CPS83COMBINE
9592          HC       2   0.245
              *

9593          KK     S84BASIN
9594          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9595          BA   0.207
9596          LG    0.20    0.13    8.40    0.08      15
9597          UI       0      49     173     264     426     309     199      91      48      20
9598          UI      11      12       0       0       0       0       0       0       0       0
9599          UI       0       0       0       0       0       0       0       0       0       0
9600          UI       0       0       0       0       0       0       0       0       0       0
9601          UI       0       0       0       0       0       0       0       0       0       0
              *

9602          KK  DS84REDIVERT
9603          KM        Additional Retention based on 100yr 2hr retention.
9604          KM        C value is based on future land use, P=2.7, A=acres
9605          DT    RS84     6.8     0.0
9606          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9607          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9608          KK   DUMMYCOMBINE
9609          HC       5
              *

9610          KK     S35BASIN
9611          KM        ROUTING FROM I-10 CULVERT WASH LOMR STUDY, FCDMC
9612          BA   0.743
9613          LG    0.27    0.25    4.55    0.39      17
9614          UI       0     244     792    1358    1591     963     448     204      75      47
9615          UI       0       0       0       0       0       0       0       0       0       0
9616          UI       0       0       0       0       0       0       0       0       0       0
9617          UI       0       0       0       0       0       0       0       0       0       0
9618          UI       0       0       0       0       0       0       0       0       0       0
              *

9619          KK  DS35REDIVERT
9620          KM        Additional Retention based on 100yr 6hr retention.
9621          KM        C value is based on future land use, P=3.2, A=acres
9622          DT    RS35    32.9     0.0
9623          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9624          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9625          KK  S35S44ROUTE
9626          KM        Cross-section: Clean straight earth
9627          RS      10    FLOW
9628          RC   0.022   0.022   0.022    3189  0.0006    0.00
9629          RX  100.00  101.00  102.00  384.00  562.00  580.00  581.00  582.00
9630          RY  1006.0 1005.00 1004.50 1004.00 1003.90 1004.50 1005.00 1006.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9631          KK     S34BASIN
9632          KM        BASIN BOUNDARY FROM 1990 TOPO
9633          BA   0.906
9634          LG    0.19    0.25    4.55    0.45      53
9635          UI       0     217     754    1154    1864    1356     868     398     213      86
9636          UI      50      51       0       0       0       0       0       0       0       0
9637          UI       0       0       0       0       0       0       0       0       0       0
9638          UI       0       0       0       0       0       0       0       0       0       0
9639          UI       0       0       0       0       0       0       0       0       0       0
              *

9640          KK  DS34REDIVERT
9641          KM        Additional Retention based on 100yr 2hr retention.
9642          KM        C value is based on future land use, P=2.7, A=acres
9643          DT    RS34    49.4     0.0
9644          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9645          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9646          KK  DS34SEDIVERT
9647          KM        Van Buren at Perryville split flow
9648          DT   DS34S     0.0     0.0
9649          DI     0.0   693.9  1872.9  4178.4  7379.2     0.0     0.0     0.0     0.0     0.0
9650          DQ     0.0   360.6  1020.0  2351.2  4235.0     0.0     0.0     0.0     0.0     0.0
              *

9651          KK  S34S44ROUTE
9652          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9653          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9654          RS       1    FLOW
9655          RC   0.035   0.035   0.035    1378  0.0058    0.00
9656          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9657          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9658          KK     S44BASIN
9659          KM        BASIN BOUNDARY FROM 1990 TOPO, I-10 CULVERT WASH FDS
9660          BA   0.078
9661          LG    0.25    0.23    4.80    0.34      14
9662          UI       0      34     109     195     145      76      27      10       6       0
9663          UI       0       0       0       0       0       0       0       0       0       0
9664          UI       0       0       0       0       0       0       0       0       0       0
9665          UI       0       0       0       0       0       0       0       0       0       0
9666          UI       0       0       0       0       0       0       0       0       0       0
              *

9667          KK  DS44REDIVERT
9668          KM        Additional Retention based on 100yr 2hr retention.
9669          KM        C value is based on future land use, P=2.7, A=acres
9670          DT    RS44     2.4     0.0
9671          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9672          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9673          KK   CPS44COMBINE
9674          HC       3   1.727
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9675          KK   SRS44STORAGE
9676          KM        Storage behind canal (I-10 Culvert Wash)
9677          KO
9678          RS       1    STOR
9679          SV   12.20    42.30    67.40   241.40
9680          SQ                   420.00  1290.00
9681          SE  1009.0 1010.00 1011.00 1012.00
9682          ST
              *

9683          KK  S44S45ROUTE
9684          KM        Cross-section: Estimated 2' deep and 3:1 side
9685          KM        slopes, width based on aerial / Manning's N
9686          KM        Value: clean straight earth
9687          RS      13    FLOW
9688          RC   0.022    0.022    0.022    5749  0.0002    0.00
9689          RX  100.00   106.00   112.00   118.00  120.00  126.00  146.00  366.00
9690          RY  1005.0 1003.90 1003.00   997.00  997.10 1001.00 1002.00 1005.00
              *

9691          KK  DS34SERETRIEVE
9692          DR   DS34S
              *

9693          KK  S34S45ROUTE
9694          KM        Cross-section: Estimated 3' deep and 4:1
9695          KM        side slopes, width based on aerial / Manning's
9696          KM        N Value: clean straight earth
9697          RS       4    FLOW
9698          RC   0.022    0.022    0.022    7089  0.0013    0.00
9699          RX  100.00   101.00   106.00   112.00  122.00  128.00  130.00  134.00
9700          RY  1004.0 1000.10 1000.00   997.00  997.10 1000.00 1000.10 1004.00
              *

9701          KK     S45BASIN
9702          KM        BLUE HORIZONS
9703          BA   0.490
9704          LG    0.23     0.24     4.60     0.40      29
9705          UI       0       58      165      292     376      542      692      519      400      295
9706          UI     173      101       70       43      18       18       18        0        0        0
9707          UI       0        0        0        0       0        0        0        0        0        0
9708          UI       0        0        0        0       0        0        0        0        0        0
9709          UI       0        0        0        0       0        0        0        0        0        0
              *
1                                          HEC-1 INPUT                                          PAGE245

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

9710          KK  DS45REDIVERT
9711          KM        Final Drainage Report for Vista De Montana
9712          DT    RS45     86.8      0.0
9713          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
9714          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

9715          KK   CPS45COMBINE
9716          HC       3    2.217
              *

9717          KK  S45S46ROUTE
9718          KM        Cross-section: Estimated 3' deep and 4:1 side
9719          KM        slopes, width based on aerial / Manning's N
9720          KM        Value: clean straight earth
9721          RS       2    FLOW
9722          RC   0.022    0.022    0.022    1537  0.0010    0.00
9723          RX  100.00   108.00   116.00   128.00  134.00  146.00  166.00  286.00
9724          RY  1005.5 1004.25 1004.00 1001.00 1001.10 1002.00 1003.00 1005.50
              *

9725          KK     S46BASIN
9726          KM        BLUE HORIZONS
9727          BA   0.904
9728          LG    0.25     0.25     3.95     0.40      25
9729          UI       0      125      442      693     952     1490     1151      835      590      287
9730          UI     187      114       38       39      39        0        0        0        0        0
9731          UI       0        0        0        0       0        0        0        0        0        0
9732          UI       0        0        0        0       0        0        0        0        0        0
9733          UI       0        0        0        0       0        0        0        0        0        0
              *

9734          KK  DS46REDIVERT
9735          KM        Final Drainage Report for Blue Horizons Phase 1
9736          KM        (100-year, 6-hour)
9737          DT    RS46    126.9      0.0
9738          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
9739          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

9740          KK   CPS46COMBINE
9741          HC       2    3.121
              *

9742          KK   SRS46STORAGE
9743          KM        Storage behind canal (WLB) Blue Horizons basins
9744          KO
9745          RS       1    STOR
9746          SV            0.32     4.52    15.06    24.62
9747          SQ                            845.00  4777.00
9748          SE  1001.5 1002.00 1003.00 1004.00 1004.50
9749          ST
              *
1                                          HEC-1 INPUT                                          PAGE246

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

9750          KK  S46S47ROUTE
9751          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9752          KM        6' depth; 2/1.5 longer route; Mannings N Value: 0.035
9753          RS       6    FLOW
9754          RC   0.035    0.035    0.035    7068  0.0059    0.00
9755          RX   25.00    50.00    75.00    99.00  124.00  148.00  173.00  198.00
9756          RY  1000.0   999.50   999.00   993.00  993.05  999.00  999.50 1000.00
              *

9757          KK     S47BASIN
9758          KM        BASIN BOUNDARY FROM 1990 TOPO
9759          BA   0.477
9760          LG    0.15     0.25     4.10     0.61      61
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9761          UI       0     100     364     545     912     739     492     274     132      68
9762          UI      25      25       0       0       0       0       0       0       0       0
9763          UI       0       0       0       0       0       0       0       0       0       0
9764          UI       0       0       0       0       0       0       0       0       0       0
9765          UI       0       0       0       0       0       0       0       0       0       0
              *

9766          KK  DS47REDIVERT
9767          KM        Additional Retention based on 100yr 2hr retention.
9768          KM        C value is based on future land use, P=2.7, A=acres
9769          DT    RS47    38.3     0.0
9770          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9771          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9772          KK   CPS47COMBINE
9773          HC       2   3.598
              *

9774          KK  S47S48ROUTE
9775          KM        Cross-section: Estimated 2' deep and 4:1 side
9776          KM        slopes, width based on aerial / Manning's N
9777          KM        Value: clean straight earth, street LOB
9778          RS      17    FLOW
9779          RC   0.016   0.022   0.022    5291  0.0076    0.00
9780          RX  100.00  108.00  116.00  122.00  126.00  132.00  152.00  272.00
9781          RY  951.00  950.50  950.00  948.00  948.10  949.00  949.50  951.00
              *

9782          KK     S48BASIN
9783          KM        BASIN BOUNDARY FROM 1990 TOPO
9784          BA   0.359
9785          LG    0.22    0.25    4.30    0.48      30
9786          UI       0     106     354     574     773     494     269     112      51      22
9787          UI      22       0       0       0       0       0       0       0       0       0
9788          UI       0       0       0       0       0       0       0       0       0       0
9789          UI       0       0       0       0       0       0       0       0       0       0
9790          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE247

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

9791          KK  DS48REDIVERT
9792          KM        Additional Retention based on 100yr 2hr retention.
9793          KM        C value is based on future land use, P=2.7, A=acres
9794          DT    RS48    12.7     0.0
9795          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9796          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9797          KK   CPS48COMBINE
9798          HC       2   3.957
              *

9799          KK   DS48SDIVERT
9800          KM        Broadway at Jackrabbit Trail split flow
9801          DT   DS48S     0.0     0.0
9802          DI     0.0  1258.3  3015.2  5339.9  8214.3     0.0     0.0     0.0     0.0     0.0
9803          DQ     0.0     4.3    62.7   189.5   448.6     0.0     0.0     0.0     0.0     0.0
              *

9804          KK  S48S50ROUTE
9805          KM        Cross-section: Ag field, assumed 0.5% side slopes
9806          KM        V-ditch / Manning's N Value: avg value for cultivated
9807          KM        areas from Estimated Manning's Roughness Coefficient
9808          KM        for Stream Channels and Flood Plains in MC
9809          RS       3    FLOW
9810          RC   0.035   0.035   0.035    4341  0.0058    0.00
9811          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9812          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9813          KK     S49BASIN
9814          KM        BASIN BOUNDARY FROM 1990 TOPO
9815          BA   0.376
9816          LG    0.25    0.25    4.65    0.38      25
9817          UI       0      76     281     423     701     592     392     227     107      57
9818          UI      20      20       0       0       0       0       0       0       0       0
9819          UI       0       0       0       0       0       0       0       0       0       0
9820          UI       0       0       0       0       0       0       0       0       0       0
9821          UI       0       0       0       0       0       0       0       0       0       0
              *

9822          KK  DS49REDIVERT
9823          KM        Additional Retention based on 100yr 2hr retention.
9824          KM        C value is based on future land use, P=2.7, A=acres
9825          DT    RS49    26.0     0.0
9826          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9827          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE248

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

9828          KK  S49S50ROUTE
9829          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9830          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9831          RS      34    FLOW
9832          RC   0.035   0.035   0.035    3542  0.0062    0.00
9833          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9834          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9835          KK     S50BASIN
9836          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
9837          BA   0.307
9838          LG    0.22    0.25    4.70    0.38      35
9839          UI       0     105     339     593     645     388     172      80      26      19
9840          UI       0       0       0       0       0       0       0       0       0       0
9841          UI       0       0       0       0       0       0       0       0       0       0
9842          UI       0       0       0       0       0       0       0       0       0       0
9843          UI       0       0       0       0       0       0       0       0       0       0
              *

9844          KK  DS50REDIVERT
9845          KM        Additional Retention based on 100yr 2hr retention.
9846          KM        C value is based on future land use, P=2.7, A=acres
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9847          DT    RS50    23.7     0.0
9848          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9849          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9850          KK   CPS50COMBINE
9851          HC       3    4.64
              *

9852          KK   SRS50STORAGE
9853          KM        Storage behind UPRR (WLB)
9854          KO
9855          RS       1    STOR
9856          SV            0.24   17.91   40.51
9857          SQ           74.00  252.00 1465.00
9858          SE  887.00  891.90  895.00  896.00
9859          ST
              *

9860          KK  S50S51ROUTE
9861          KM        Cross-section: Estimated 3' deep and 4:1 side
9862          KM        slopes, width based on aerial / Manning's N
9863          KM        Value: earth w/ sparse trees and shrubs
9864          RS       1    FLOW
9865          RC   0.032   0.032   0.032     296  0.0068    0.00
9866          RX  100.00  106.00  112.00  125.00  146.00  156.00  200.00  203.00
9867          RY  894.20  894.10  894.00  886.00  886.10  894.00  894.10  894.20
              *
1                                        HEC-1 INPUT                                          PAGE249

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

9868          KK     S36BASIN
9869          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
9870          KM        DRAINING TO CULVERT UNDER I-10
9871          BA   0.270
9872          LG    0.11    0.24    4.35    0.55      42
9873          UI       0     154     465     768     445     169      56      22       0       0
9874          UI       0       0       0       0       0       0       0       0       0       0
9875          UI       0       0       0       0       0       0       0       0       0       0
9876          UI       0       0       0       0       0       0       0       0       0       0
9877          UI       0       0       0       0       0       0       0       0       0       0
              *

9878          KK  DS36REDIVERT
9879          KM        Master Drainage Report for Cotton Lane RV and Golf Resort
9880          DT    RS36   124.6     0.0
9881          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9882          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9883          KK   SRS36STORAGE
9884          KM        Borrow pit (WLB)
9885          KO
9886          RS       1    STOR
9887          SV            6.32   19.56  300.91  635.31  899.95  942.11  979.46
9888          SQ                                            715.00 2198.00
9889          SE  970.40  972.00  980.00  990.00 1000.00 1007.00 1008.00 1008.80
9890          ST
              *

9891          KK  S36S37ROUTE
9892          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9893          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9894          RS       1    FLOW
9895          RC   0.035   0.035   0.035    6104  0.0059    0.00
9896          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9897          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9898          KK     S37BASIN
9899          KM        BASIN BOUNDARY FROM 1990 TOPO
9900          BA   1.030
9901          LG    0.25    0.25    4.65    0.38      22
9902          UI       0     193     741    1108    1814    1663    1107     688     303     186
9903          UI      62      53      52       0       0       0       0       0       0       0
9904          UI       0       0       0       0       0       0       0       0       0       0
9905          UI       0       0       0       0       0       0       0       0       0       0
9906          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                        HEC-1 INPUT                                          PAGE250

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

9907          KK  DS37REDIVERT
9908          KM        Additional Retention based on 100yr 6hr retention.
9909          KM        C value is based on future land use, P=3.2, A=acres
9910          DT    RS37    60.9     0.0
9911          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9912          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9913          KK   CPS37COMBINE
9914          HC       2     1.3
              *

9915          KK  S37S38ROUTE
9916          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9917          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9918          RS       5    FLOW
9919          RC   0.035   0.035   0.035    5485  0.0062    0.00
9920          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9921          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9922          KK     S38BASIN
9923          KM        BASIN BOUNDARY FROM 1990 TOPO
9924          BA   0.778
9925          LG    0.24    0.25    4.70    0.38      24
9926          UI       0     167     611     922    1519    1203     782     410     206     100
9927          UI      41      42       0       0       0       0       0       0       0       0
9928          UI       0       0       0       0       0       0       0       0       0       0
9929          UI       0       0       0       0       0       0       0       0       0       0
9930          UI       0       0       0       0       0       0       0       0       0       0
              *

9931          KK  DS38REDIVERT
9932          KM        Additional Retention based on 100yr 6hr retention.
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9933          KM        C value is based on future land use, P=3.2, A=acres
9934          DT    RS38    52.6     0.0
9935          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9936          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9937          KK   CPS38COMBINE
9938          HC       2   2.078
              *

9939          KK  S38S39ROUTE
9940          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9941          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9942          RS       6    FLOW
9943          RC   0.035   0.035   0.035    5289  0.0061    0.00
9944          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9945          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                          HEC-1 INPUT                                          PAGE251

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

9946          KK     S39BASIN
9947          KM        BASIN BOUNDARY FROM 1990 TOPO
9948          BA   0.597
9949          LG    0.24    0.25    4.70    0.37      24
9950          UI       0     104     414     609     985     986     665     428     193     118
9951          UI      50      29      30       0       0       0       0       0       0       0
9952          UI       0       0       0       0       0       0       0       0       0       0
9953          UI       0       0       0       0       0       0       0       0       0       0
9954          UI       0       0       0       0       0       0       0       0       0       0
              *

9955          KK  DS39REDIVERT
9956          KM        Additional Retention based on 100yr 6hr retention.
9957          KM        C value is based on future land use, P=3.2, A=acres
9958          DT    RS39    45.4     0.0
9959          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9960          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9961          KK   CPS39COMBINE
9962          HC       2   2.675
              *

9963          KK  S39S43ROUTE
9964          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9965          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9966          RS       9    FLOW
9967          RC   0.035   0.035   0.035    5424  0.0029    0.00
9968          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9969          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9970          KK     S40BASIN
9971          KM        BASIN BOUNDARY FROM 1990 TOPO
9972          BA   0.512
9973          LG    0.10    0.25    4.70    0.44      78
9974          UI       0     267     798    1393     897     388     147      40       0       0
9975          UI       0       0       0       0       0       0       0       0       0       0
9976          UI       0       0       0       0       0       0       0       0       0       0
9977          UI       0       0       0       0       0       0       0       0       0       0
9978          UI       0       0       0       0       0       0       0       0       0       0
              *

9979          KK  DS40REDIVERT
9980          KM        Additional Retention based on 100yr 2hr retention.
9981          KM        C value is based on future land use, P=2.7, A=acres
9982          DT    RS40    54.7     0.0
9983          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9984          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE252

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

9985          KK  S40S41ROUTE
9986          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9987          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9988          RS       6    FLOW
9989          RC   0.035   0.035   0.035    5301  0.0070    0.00
9990          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9991          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9992          KK     S41BASIN
9993          KM        BASIN BOUNDARY FROM 1990 TOPO AND COTTONWOOD UNIT 1 - FINAL DRAINAGE
9994          KM        REPORT (3RD REVIEW) DATED 12/7/05 BY DEA
9995          BA   1.003
9996          LG    0.25    0.25    4.65    0.37      23
9997          UI       0     141     521     802    1125    1709    1242     902     611     285
9998          UI     189     103      43      44      44       0       0       0       0       0
9999          UI       0       0       0       0       0       0       0       0       0       0
10000         UI       0       0       0       0       0       0       0       0       0       0
10001         UI       0       0       0       0       0       0       0       0       0       0
              *

10002         KK  DS41REDIVERT
10003         KM        Additional Retention based on 100yr 2hr retention.
10004         KM        C value is based on future land use, P=2.7, A=acres
10005         DT    RS41    64.2     0.0
10006         DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10007         DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

10008         KK   CPS41COMBINE
10009         HC       2   1.515
              *

10010         KK  S41S42ROUTE
10011         KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10012         KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10013         RS       6    FLOW
10014         RC   0.035   0.035   0.035    5312  0.0064    0.00
10015         RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10016         RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
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10017          KK     S42BASIN
10018          KM        BASIN BOUNDARY FROM 1990 TOPO
10019          BA   0.509
10020          LG   0.23    0.25    4.60    0.41      37
10021          UI      0     135     463     719    1088     727     445     184     103      30
10022          UI     29       0       0       0       0       0       0       0       0       0
10023          UI      0       0       0       0       0       0       0       0       0       0
10024          UI      0       0       0       0       0       0       0       0       0       0
10025          UI      0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10026          KK  DS42REDIVERT
10027          KM        Additional Retention based on 100yr 2hr retention.
10028          KM        C value is based on future land use, P=2.7, A=acres
10029          DT    RS42    39.1     0.0
10030          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10031          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10032          KK   CPS42COMBINE
10033          HC       2   2.024
               *

10034          KK  S42S43ROUTE
10035          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10036          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10037          RS       4    FLOW
10038          RC   0.035   0.035   0.035    3069  0.0039    0.00
10039          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10040          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10041          KK     S43BASIN
10042          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
10043          BA   0.347
10044          LG   0.17    0.25    4.80    0.39      39
10045          UI      0     121     395     693     719     433     183      87      25      22
10046          UI      0       0       0       0       0       0       0       0       0       0
10047          UI      0       0       0       0       0       0       0       0       0       0
10048          UI      0       0       0       0       0       0       0       0       0       0
10049          UI      0       0       0       0       0       0       0       0       0       0
               *

10050          KK  DS43REDIVERT
10051          KM        Additional Retention based on 100yr 2hr retention.
10052          KM        C value is based on future land use, P=2.7, A=acres
10053          DT    RS43    27.5     0.0
10054          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10055          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10056          KK   CPS43COMBINE
10057          HC       3   5.046
               *

10058          KK   SRS43STORAGE
10059          KM        Storage behind UPRR (WLB)
10060          KO
10061          RS       1    STOR
10062          SV            0.22   18.80   41.67   62.23   82.48
10063          SQ           24.00   57.00   67.00  798.00 3073.00
10064          SE  894.50  896.00  898.00  898.90  899.50  900.00
10065          ST
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10066          KK  S43S51ROUTE
10067          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10068          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10069          RS       6    FLOW
10070          RC   0.035   0.035   0.035    3220  0.0006    0.00
10071          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10072          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10073          KK     S33BASIN
10074          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10075          KM        SOUTHERN BOUNDARY IS BOUNDED BY BUCKEYE CANAL
10076          BA   0.307
10077          LG   0.11    0.21    6.40    0.22      56
10078          UI      0      79     278     424     657     442     272     113      65      17
10079          UI     18       0       0       0       0       0       0       0       0       0
10080          UI      0       0       0       0       0       0       0       0       0       0
10081          UI      0       0       0       0       0       0       0       0       0       0
10082          UI      0       0       0       0       0       0       0       0       0       0
               *

10083          KK  DS33REDIVERT
10084          KM        Additional Retention based on 100yr 6hr retention.
10085          KM        C value is based on future land use, P=3.2, A=acres
10086          DT    RS33    35.2     0.0
10087          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10088          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10089          KK  S33S51ROUTE
10090          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10091          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10092          RS      27    FLOW
10093          RC   0.035   0.035   0.035    3874  0.0005    0.00
10094          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10095          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10096          KK     S51BASIN
10097          KM        Boundary based on Aerial
10098          BA   0.124
10099          LG   0.15    0.17    6.80    0.18      56
10100          UI      0      85     253     363     178      56      15       0       0       0
10101          UI      0       0       0       0       0       0       0       0       0       0
10102          UI      0       0       0       0       0       0       0       0       0       0
10103          UI      0       0       0       0       0       0       0       0       0       0
10104          UI      0       0       0       0       0       0       0       0       0       0
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                *
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10105           KK  DS51REDIVERT
10106           KM        Additional Retention based on 100yr 2hr retention.
10107           KM        C value is based on future land use, P=2.7, A=acres
10108           DT    RS51     12.2     0.0
10109           DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10110           DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

10111           KK   CPS51COMBINE
10112           HC       4  10.117
                *

10113           KK   SRS51STORAGE
10114           KM        Storage behind canal (WLB)
10115           KO
10116           RS       1     STOR
10117           SV             3.80   61.42   88.60  116.74  146.56  179.56
10118           SQ                                   1011.00 3120.00 5732.00
10119           SE  890.20  892.00  894.00  894.50  895.00  895.50  899.00
10120           ST
                *

10121           KK  S51S54ROUTE
10122           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10123           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10124           RS       3     FLOW
10125           RC   0.035   0.035   0.035    2654  0.0018    0.00
10126           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10127           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

10128           KK     S52BASIN
10129           KM        BASIN BOUNDARY FROM 1990 TOPO
10130           KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
10131           BA   0.417
10132           LG    0.29    0.15    7.60    0.10       6
10133           UI       0      51     146     259     338     485     594     433     335     238
10134           UI     129      86      53      28      16      15      15       0       0       0
10135           UI       0       0       0       0       0       0       0       0       0       0
10136           UI       0       0       0       0       0       0       0       0       0       0
10137           UI       0       0       0       0       0       0       0       0       0       0
                *

10138           KK  DS52REDIVERT
10139           KM        Additional Retention based on 100yr 2hr retention.
10140           KM        C value is based on future land use, P=2.7, A=acres
10141           DT    RS52     24.4     0.0
10142           DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10143           DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10144           KK  S52S54ROUTE
10145           KM        Cross-section: side slopes, width based on aerial
10146           KM        and topo / Manning's N Value: clean straight earth
10147           KM        ag field ROB
10148           RS       4     FLOW
10149           RC   0.022   0.022   0.038    2643  0.0015    0.00
10150           RX  100.00  115.00  130.00  135.00  145.00  367.00  802.00 1237.00
10151           RY  886.00  885.00  884.00  882.00  882.10  884.00  885.00  886.00
                *

10152           KK     S54BASIN
10153           KM        BASIN BOUNDARY FROM 1990 TOPO
10154           BA   0.419
10155           LG    0.10    0.20    6.40    0.22      75
10156           UI       0     454    1428    1009     270      61       0       0       0       0
10157           UI       0       0       0       0       0       0       0       0       0       0
10158           UI       0       0       0       0       0       0       0       0       0       0
10159           UI       0       0       0       0       0       0       0       0       0       0
10160           UI       0       0       0       0       0       0       0       0       0       0
                *

10161           KK  DS54REDIVERT
10162           KM        Additional Retention based on 100yr 2hr retention.
10163           KM        C value is based on future land use, P=2.7, A=acres
10164           DT    RS54     42.5     0.0
10165           DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10166           DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

10167           KK   CPS54COMBINE
10168           HC       3  10.953
                *

10169           KK  S54S55ROUTE
10170           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10171           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10172           RS       3     FLOW
10173           RC   0.035   0.035   0.035    3902  0.0011    0.00
10174           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10175           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

10176           KK     S53BASIN
10177           KM        BASIN BOUNDARY FROM 1990 TOPO
10178           BA   0.401
10179           LG    0.28    0.15    7.60    0.10      12
10180           UI       0      59     228     344     505     693     483     344     210     101
10181           UI      64      27      18      18       0       0       0       0       0       0
10182           UI       0       0       0       0       0       0       0       0       0       0
10183           UI       0       0       0       0       0       0       0       0       0       0
10184           UI       0       0       0       0       0       0       0       0       0       0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10185           KK  DS53REDIVERT
10186           KM        Additional Retention based on 100yr 2hr retention.
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10187          KM        C value is based on future land use, P=2.7, A=acres
10188          DT    RS53    25.4     0.0
10189          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10190          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10191          KK  S53S55ROUTE
10192          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10193          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10194          RS       8    FLOW
10195          RC   0.035   0.035   0.035    5277  0.0019    0.00
10196          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10197          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10198          KK     S55BASIN
10199          KM        BASIN BOUNDARY FROM 1990 TOPO
10200          BA   0.754
10201          LG    0.10    0.15    8.00    0.12      77
10202          UI       0     153     573     857    1420    1178     782     444     210     113
10203          UI      39      40       0       0       0       0       0       0       0       0
10204          UI       0       0       0       0       0       0       0       0       0       0
10205          UI       0       0       0       0       0       0       0       0       0       0
10206          UI       0       0       0       0       0       0       0       0       0       0
               *

10207          KK  DS55REDIVERT
10208          KM        Additional Retention based on 100yr 2hr retention.
10209          KM        C value is based on future land use, P=2.7, A=acres
10210          DT    RS55    79.1     0.0
10211          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10212          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10213          KK   CPS55COMBINE
10214          HC       3  12.108
               *

10215          KK  S55S74ROUTE
10216          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10217          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10218          RS      17    FLOW
10219          RC   0.035   0.035   0.035    8197  0.0010    0.00
10220          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10221          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *
1                                    HEC-1 INPUT                                          PAGE258

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

10222          KK     S56BASIN
10223          KM        BASIN BOUNDARY FROM 1990 TOPO
10224          BA   0.606
10225          LG    0.18    0.25    4.00    0.60      55
10226          UI       0     194     642    1097    1293     788     378     171      64      38
10227          UI       0       0       0       0       0       0       0       0       0       0
10228          UI       0       0       0       0       0       0       0       0       0       0
10229          UI       0       0       0       0       0       0       0       0       0       0
10230          UI       0       0       0       0       0       0       0       0       0       0
               *

10231          KK  DS56REDIVERT
10232          KM        Additional Retention based on 100yr 2hr retention.
10233          KM        C value is based on future land use, P=2.7, A=acres
10234          DT    RS56    43.0     0.0
10235          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10236          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10237          KK  S56S57ROUTE
10238          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10239          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10240          RS       3    FLOW
10241          RC   0.035   0.035   0.035    5289  0.0072    0.00
10242          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10243          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10244          KK     S57BASIN
10245          KM        BASIN BOUNDARY FROM 1990 TOPO
10246          BA   0.767
10247          LG    0.19    0.25    4.10    0.56      45
10248          UI       0     184     648     995    1584    1143     723     328     179      68
10249          UI      43      43       0       0       0       0       0       0       0       0
10250          UI       0       0       0       0       0       0       0       0       0       0
10251          UI       0       0       0       0       0       0       0       0       0       0
10252          UI       0       0       0       0       0       0       0       0       0       0
               *

10253          KK  DS57REDIVERT
10254          KM        Additional Retention based on 100yr 2hr retention.
10255          KM        C value is based on future land use, P=2.7, A=acres
10256          DT    RS57    44.5     0.0
10257          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10258          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10259          KK   CPS57COMBINE
10260          HC       2   1.373
               *
1                                    HEC-1 INPUT                                          PAGE259

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

10261          KK  S57S58ROUTE
10262          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10263          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10264          RS       2    FLOW
10265          RC   0.035   0.035   0.035    3501  0.0063    0.00
10266          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10267          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10268          KK   DS48SRETRIEVE
10269          DR   DS48S
               *

10270          KK  S48S58ROUTE
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10271          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10272          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10273          RS       7    FLOW
10274          RC   0.035   0.035   0.035    2870  0.0063    0.00
10275          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10276          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10277          KK     S58BASIN
10278          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
10279          BA   0.204
10280          LG    0.16    0.25    4.50    0.47      58
10281          UI       0     101     305     542     366     168      64      17      16       0
10282          UI       0       0       0       0       0       0       0       0       0       0
10283          UI       0       0       0       0       0       0       0       0       0       0
10284          UI       0       0       0       0       0       0       0       0       0       0
10285          UI       0       0       0       0       0       0       0       0       0       0
               *

10286          KK  DS58REDIVERT
10287          KM        Additional Retention based on 100yr 2hr retention.
10288          KM        C value is based on future land use, P=2.7, A=acres
10289          DT    RS58    20.9     0.0
10290          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10291          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10292          KK   CPS58COMBINE
10293          HC       3   5.534
               *

10294          KK   SRS58STORAGE
10295          KM        Storage behind UPRR (WLB)
10296          KO
10297          RS       1    STOR
10298          SV            0.19    0.54    3.31    7.74
10299          SQ          138.00  153.00 1483.00 3332.00
10300          SE  894.40  898.00  898.40  900.00  900.50
10301          ST
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10302          KK  S58S59ROUTE
10303          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10304          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10305          RS       4    FLOW
10306          RC   0.035   0.035   0.035    3138  0.0019    0.00
10307          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10308          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10309          KK     S59BASIN
10310          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
10311          KM        AND OVERTOPS BUCKEYE CANAL
10312          BA   0.165
10313          LG    0.15    0.25    4.70    0.41      55
10314          UI       0     275     706     249      38       0       0       0       0       0
10315          UI       0       0       0       0       0       0       0       0       0       0
10316          UI       0       0       0       0       0       0       0       0       0       0
10317          UI       0       0       0       0       0       0       0       0       0       0
10318          UI       0       0       0       0       0       0       0       0       0       0
               *

10319          KK  DS59REDIVERT
10320          KM        Additional Retention based on 100yr 2hr retention.
10321          KM        C value is based on future land use, P=2.7, A=acres
10322          DT    RS59    17.0     0.0
10323          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10324          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10325          KK   CPS59COMBINE
10326          HC       2   5.699
               *

10327          KK   SRS59STORAGE
10328          KM        Storage behind canal (WLB)
10329          KO
10330          RS       1    STOR
10331          SV            0.08   14.16   18.99   64.86
10332          SQ                           21.00 2267.00
10333          SE  889.90  890.00  891.70  892.00  894.00
10334          ST
               *

10335          KK  S59S74ROUTE
10336          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10337          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10338          RS       9    FLOW
10339          RC   0.035   0.035   0.035    8042  0.0030    0.00
10340          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10341          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10342          KK     S72BASIN
10343          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
10344          BA   0.401
10345          LG    0.17    0.15    8.80    0.08      54
10346          UI       0      61     254     374     571     696     466     319     163      93
10347          UI      51      19      19      19       0       0       0       0       0       0
10348          UI       0       0       0       0       0       0       0       0       0       0
10349          UI       0       0       0       0       0       0       0       0       0       0
10350          UI       0       0       0       0       0       0       0       0       0       0
               *

10351          KK  DS72REDIVERT
10352          KM        Additional Retention based on 100yr 2hr retention.
10353          KM        C value is based on future land use, P=2.7, A=acres
10354          DT    RS72    35.9     0.0
10355          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10356          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
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10357          KK  S72S73ROUTE
10358          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10359          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10360          RS       5    FLOW
10361          RC   0.035   0.035   0.035    3142  0.0013    0.00
10362          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10363          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10364          KK     S73BASIN
10365          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
10366          BA   0.276
10367          LG    0.15    0.15    8.80    0.08      65
10368          UI       0     105     332     600     554     325     126      57      18      19
10369          UI       0       0       0       0       0       0       0       0       0       0
10370          UI       0       0       0       0       0       0       0       0       0       0
10371          UI       0       0       0       0       0       0       0       0       0       0
10372          UI       0       0       0       0       0       0       0       0       0       0
               *

10373          KK  DS73REDIVERT
10374          KM        Additional Retention based on 100yr 2hr retention.
10375          KM        C value is based on future land use, P=2.7, A=acres
10376          DT    RS73    23.5     0.0
10377          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10378          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10379          KK   CPS73COMBINE
10380          HC       2   0.677
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10381          KK  S73S74ROUTE
10382          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10383          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10384          RS       8    FLOW
10385          RC   0.035   0.035   0.035    5333  0.0011    0.00
10386          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10387          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10388          KK     S74BASIN
10389          KM        BASIN BOUNDARY FROM 1990 TOPO
10390          BA   1.608
10391          LG    0.16    0.15    7.30    0.14      58
10392          UI       0     183     473     875    1131    1527    2211    1761    1376    1031
10393          UI     741     381     286     183      87      56      56      56       0       0
10394          UI       0       0       0       0       0       0       0       0       0       0
10395          UI       0       0       0       0       0       0       0       0       0       0
10396          UI       0       0       0       0       0       0       0       0       0       0
               *

10397          KK  DS74REDIVERT
10398          KM        Additional Retention based on 100yr 2hr retention.
10399          KM        C value is based on future land use, P=2.7, A=acres
10400          DT    RS74   143.6     0.0
10401          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10402          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10403          KK   CPS74COMBINE
10404          HC       4  16.135
               *

10405          KK   DS741DIVERT
10406          KM        MC85 at Airport Road split flow
10407          DT  DS741W     0.0     0.0
10408          DI     0.0   332.5  1924.0  5255.7 11178.0     0.0     0.0     0.0     0.0     0.0
10409          DQ     0.0   142.5   854.3  2357.0  5037.5     0.0     0.0     0.0     0.0     0.0
               *

10410          KK   DS742DIVERT
10411          KM        MC85 at Airport Road split flow
10412          DT  DS742W     0.0     0.0
10413          DI     0.0   190.0  1069.7  2898.7  6140.5     0.0     0.0     0.0     0.0     0.0
10414          DQ     0.0    21.2    60.0   110.2   169.7     0.0     0.0     0.0     0.0     0.0
               *

10415          KK  S74S79ROUTE
10416          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10417          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10418          RS       8    FLOW
10419          RC   0.035   0.035   0.035    5186  0.0012    0.00
10420          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10421          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10422          KK     S79BASIN
10423          KM        BASIN BOUNDARY FROM 1990 TOPO
10424          BA   0.918
10425          LG    0.25    0.15    7.30    0.13      24
10426          UI       0     118     380     631     829    1312    1241     910     672     439
10427          UI     207     154      88      36      37      36       0       0       0       0
10428          UI       0       0       0       0       0       0       0       0       0       0
10429          UI       0       0       0       0       0       0       0       0       0       0
10430          UI       0       0       0       0       0       0       0       0       0       0
               *

10431          KK  DS79REDIVERT
10432          KM        Additional Retention based on 100yr 2hr retention.
10433          KM        C value is based on future land use, P=2.7, A=acres
10434          DT    RS79    62.1     0.0
10435          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10436          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10437          KK   CPS79COMBINE
10438          HC       2  17.053
               *

10439          KK  S79S80ROUTE
10440          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
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10441          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10442          RS       4    FLOW
10443          RC   0.035   0.035   0.035    2679  0.0007    0.00
10444          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10445          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10446          KK     S92BASIN
10447          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
10448          BA   0.689
10449          LG    0.14    0.15    8.40    0.10      64
10450          UI       0     138     510     771    1267    1092     724     424     199     107
10451          UI      36      37       0       0       0       0       0       0       0       0
10452          UI       0       0       0       0       0       0       0       0       0       0
10453          UI       0       0       0       0       0       0       0       0       0       0
10454          UI       0       0       0       0       0       0       0       0       0       0
               *

10455          KK  DS92REDIVERT
10456          KM        Additional Retention based on 100yr 2hr retention.
10457          KM        C value is based on future land use, P=2.7, A=acres
10458          DT    RS92    66.4     0.0
10459          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10460          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10461          KK   DS741RETRIEVE
10462          DR  DS741W
               *

10463          KK  S74S92ROUTE
10464          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10465          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10466          RS       2    FLOW
10467          RC   0.035   0.035   0.035    1033  0.0010    0.00
10468          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10469          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10470          KK   CPS92COMBINE
10471          HC       2  16.824
               *

10472          KK  S92S80ROUTE
10473          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10474          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10475          RS       6    FLOW
10476          RC   0.035   0.035   0.035    5676  0.0014    0.00
10477          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10478          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10479          KK   DS742RETRIEVE
10480          DR  DS742W
               *

10481          KK  S74S80ROUTE
10482          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10483          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10484          RS      30    FLOW
10485          RC   0.035   0.035   0.035    5909  0.0010    0.00
10486          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10487          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10488          KK     S80BASIN
10489          KM        BASIN BOUNDARY FROM 1990 TOPO, PORTION OF SOUTHERN BOUNDARY
10490          KM        IS BOUNDED BY SUZY DEAN DITCH
10491          BA   0.435
10492          LG    0.28    0.25    5.00    0.32      17
10493          UI       0      50     134     244     313     424     611     471     369     275
10494          UI     187      98      72      50      18      15      16      15       0       0
10495          UI       0       0       0       0       0       0       0       0       0       0
10496          UI       0       0       0       0       0       0       0       0       0       0
10497          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10498          KK  DS80REDIVERT
10499          KM        Additional Retention based on 100yr 2hr retention.
10500          KM        C value is based on future land use, P=2.7, A=acres
10501          DT    RS80    22.9     0.0
10502          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10503          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10504          KK   CPS80COMBINE
10505          HC       4  18.177
               *

10506          KK     S90BASIN
10507          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
10508          BA   0.093
10509          LG    0.18    0.15    8.00    0.11      50
10510          UI       0      69     212     270     119      36       9       0       0       0
10511          UI       0       0       0       0       0       0       0       0       0       0
10512          UI       0       0       0       0       0       0       0       0       0       0
10513          UI       0       0       0       0       0       0       0       0       0       0
10514          UI       0       0       0       0       0       0       0       0       0       0
               *

10515          KK  DS90REDIVERT
10516          KM        Additional Retention based on 100yr 2hr retention.
10517          KM        C value is based on future land use, P=2.7, A=acres
10518          DT    RS90     8.2     0.0
10519          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10520          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10521          KK  S90S91ROUTE
10522          KM        Cross-section: Estimated 12' deep, side slopes and width based on
10523          KM        aerial and topo / Manning's N Value: clean straight earth
10524          RS       4    FLOW
```

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10525          RC   0.022   0.022   0.022    2156  0.0009    0.00
10526          RX  100.00  115.00  130.00  150.00  162.00  182.00  192.00  202.00
10527          RY  868.20  868.10  868.00  856.00  856.10  868.00  868.10  868.20
               *

10528          KK     S91BASIN
10529          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
10530          KM        AND EXITS MODEL
10531          BA   0.215
10532          LG    0.18    0.14    8.40    0.09      46
10533          UI       0      57     197     307     463     308     182      77      42      12
10534          UI      13       0       0       0       0       0       0       0       0       0
10535          UI       0       0       0       0       0       0       0       0       0       0
10536          UI       0       0       0       0       0       0       0       0       0       0
10537          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10538          KK  DS91REDIVERT
10539          KM        Additional Retention based on 100yr 2hr retention.
10540          KM        C value is based on future land use, P=2.7, A=acres
10541          DT    RS91    14.7     0.0
10542          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10543          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10544          KK   CPS91COMBINE
10545          HC       2   0.308
               *

10546          KK     S89BASIN
10547          KM        BASIN BOUNDARY FROM 1990 TOPO, EASTERN BOUNDARY
10548          KM        IS BOUNDED BY SUZY DEAN DITCH
10549          BA   0.197
10550          LG    0.29    0.15    8.80    0.07      13
10551          UI       0      50     172     262     416     287     183      77      43      15
10552          UI      11       0       0       0       0       0       0       0       0       0
10553          UI       0       0       0       0       0       0       0       0       0       0
10554          UI       0       0       0       0       0       0       0       0       0       0
10555          UI       0       0       0       0       0       0       0       0       0       0
               *

10556          KK  DS89REDIVERT
10557          KM        Additional Retention based on 100yr 2hr retention.
10558          KM        C value is based on future land use, P=2.7, A=acres
10559          DT    RS89    11.8     0.0
10560          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10561          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10562          KK     S88BASIN
10563          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10564          BA   0.071
10565          LG    0.28    0.17    6.80    0.15      16
10566          UI       0      41     122     202     117      44      15       6       0       0
10567          UI       0       0       0       0       0       0       0       0       0       0
10568          UI       0       0       0       0       0       0       0       0       0       0
10569          UI       0       0       0       0       0       0       0       0       0       0
10570          UI       0       0       0       0       0       0       0       0       0       0
               *

10571          KK  DS88REDIVERT
10572          KM        Additional Retention based on 100yr 2hr retention.
10573          KM        C value is based on future land use, P=2.7, A=acres
10574          DT    RS88     3.6     0.0
10575          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10576          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10577          KK     S87BASIN
10578          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10579          BA   0.121
10580          LG    0.19    0.15    8.00    0.11      44
10581          UI       0      43     139     249     246     150      62      29       8       8
10582          UI       0       0       0       0       0       0       0       0       0       0
10583          UI       0       0       0       0       0       0       0       0       0       0
10584          UI       0       0       0       0       0       0       0       0       0       0
10585          UI       0       0       0       0       0       0       0       0       0       0
               *

10586          KK  DS87REDIVERT
10587          KM        Additional Retention based on 100yr 2hr retention.
10588          KM        C value is based on future land use, P=2.7, A=acres
10589          DT    RS87     9.7     0.0
10590          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10591          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10592          KK     S86BASIN
10593          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10594          BA   0.202
10595          LG    0.29    0.15    7.30    0.11       5
10596          UI       0      75     241     435     407     240      93      44      14      13
10597          UI       0       0       0       0       0       0       0       0       0       0
10598          UI       0       0       0       0       0       0       0       0       0       0
10599          UI       0       0       0       0       0       0       0       0       0       0
10600          UI       0       0       0       0       0       0       0       0       0       0
               *

10601          KK  DS86REDIVERT
10602          KM        Additional Retention based on 100yr 2hr retention.
10603          KM        C value is based on future land use, P=2.7, A=acres
10604          DT    RS86    11.9     0.0
10605          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10606          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10607          KK     S85BASIN
10608          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10609          BA   0.337
10610          LG    0.30    0.15    7.00    0.12       5
10611          UI       0      44     145     239     312     500     452     327     243     148
10612          UI      75      53      27      14      14      13       0       0       0       0
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10613          UI       0       0       0       0       0       0       0       0       0       0
10614          UI       0       0       0       0       0       0       0       0       0       0
10615          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10616          KK  DS85REDIVERT
10617          KM        Additional Retention based on 100yr 2hr retention.
10618          KM        C value is based on future land use, P=2.7, A=acres
10619          DT    RS85    20.3     0.0
10620          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10621          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10622          KK   DUMMYCOMBINE
10623          HC       4
               *

10624          KK   DUMMYCOMBINE
10625          HC       5
               *

10626          KK     W59BASIN
10627          KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN
10628          KM        WOOD/PATEL 2006, NEW 2' CI TOPO OBTAINED 2008
10629          BA   0.168
10630          LG    0.10    0.25    4.10    0.64      64
10631          UI       0     165     529     425     136      32       0       0       0       0
10632          UI       0       0       0       0       0       0       0       0       0       0
10633          UI       0       0       0       0       0       0       0       0       0       0
10634          UI       0       0       0       0       0       0       0       0       0       0
10635          UI       0       0       0       0       0       0       0       0       0       0
               *

10636          KK  DW59REDIVERT
10637          KM        Additional Retention based on 100yr 2hr retention.
10638          KM        C value is based on future land use, P=2.7, A=acres
10639          DT    RW59    15.9     0.0
10640          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10641          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10642          KK  W59W60ROUTE
10643          KM        Cross-section: Estimated 2' deep and 4:1 side
10644          KM        slopes, width based on aerial / Manning's N
10645          KM        Value: earth w/ sparse trees and shrubs
10646          RS       3    FLOW
10647          RC   0.032   0.032   0.032     841  0.0006    0.00
10648          RX  100.00  102.00  104.00  112.00  122.00  130.00  140.00  300.00
10649          RY  1097.0 1096.25 1096.00 1094.00 1094.10 1096.00 1096.10 1097.00
               *

10650          KK     W61BASIN
10651          BA   0.389
10652          LG    0.23    0.25    4.15    0.51      31
10653          UI       0     294     911    1125     479     146      36       0       0       0
10654          UI       0       0       0       0       0       0       0       0       0       0
10655          UI       0       0       0       0       0       0       0       0       0       0
10656          UI       0       0       0       0       0       0       0       0       0       0
10657          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10658          KK  DW61REDIVERT
10659          KM        Additional Retention based on 100yr 2hr retention.
10660          KM        C value is based on future land use, P=2.7, A=acres
10661          DT    RW61    27.4     0.0
10662          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10663          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10664          KK  DW61SEDIVERT
10665          KM        Divert culvert flows under I-10
10666          DT   DW61S     0.0     0.0
10667          DI     0.0   188.0  1000.0  2000.0  3000.0     0.0     0.0     0.0     0.0     0.0
10668          DQ     0.0   188.0   190.0   195.0   200.0     0.0     0.0     0.0     0.0     0.0
               *

10669          KK     W60BASIN
10670          KM        BASIN BOUNDARY FROM SIENNA HILLS AKA TESOTA HILLS
10671          KM        PRELIM DRAINAGE REPORT, CMX, 2006
10672          BA   0.161
10673          LG    0.11    0.25    3.95    0.40      76
10674          UI       0     183     565     378      95      19       0       0       0       0
10675          UI       0       0       0       0       0       0       0       0       0       0
10676          UI       0       0       0       0       0       0       0       0       0       0
10677          UI       0       0       0       0       0       0       0       0       0       0
10678          UI       0       0       0       0       0       0       0       0       0       0
               *

10679          KK  DW60REDIVERT
10680          KM        Additional Retention based on 100yr 2hr retention.
10681          KM        C value is based on future land use, P=2.7, A=acres
10682          DT    RW60    16.4     0.0
10683          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10684          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10685          KK   CPW60COMBINE
10686          HC       3   0.718
               *

10687          KK   SRW60STORAGE
10688          KM        Storage behind I-10
10689          KO
10690          RS       1    STOR
10691          SV            0.23    2.30   11.40   29.80   51.60   51.60
10692          SQ           12.00   45.00  100.00  140.00  152.00 7400.00
10693          SE  1095.0 1096.00 1097.00 1098.00 1099.00 1100.00 1101.00
10694          ST
               *
1                                          HEC-1 INPUT                                          PAGE270

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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10695          KK  W60S61ROUTE
10696          KM        Cross-section: Estimated 3' deep and 4:1 side
10697          KM        slopes, width based on aerial / Manning's N
10698          KM        Value: earth w/ sparse trees and shrubs
10699          RS       6    FLOW
10700          RC   0.032   0.032   0.032    3609  0.0094    0.00
10701          RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
10702          RY  1000.0  999.80  999.30  999.00  999.00  999.30  999.80 1000.00
               *

10703          KK     S61BASIN
10704          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10705          BA   0.234
10706          LG    0.11    0.25    4.15    0.64      45
10707          UI       0     319     922     452      93       0       0       0       0       0
10708          UI       0       0       0       0       0       0       0       0       0       0
10709          UI       0       0       0       0       0       0       0       0       0       0
10710          UI       0       0       0       0       0       0       0       0       0       0
10711          UI       0       0       0       0       0       0       0       0       0       0
               *

10712          KK  DS61REDIVERT
10713          KM        Additional Retention based on 100yr 2hr retention.
10714          KM        C value is based on future land use, P=2.7, A=acres
10715          DT    RS61    15.5     0.0
10716          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10717          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10718          KK   CPS61COMBINE
10719          HC       2   0.952
               *

10720          KK  S61S62ROUTE
10721          KM        Cross-section: Estimated 3' deep, side slopes
10722          KM        and width based on aerial and topo / Manning's
10723          KM        N Value: earth w/ sparse trees and shrubs
10724          RS       1    FLOW
10725          RC   0.032   0.032   0.032    2298  0.0070    0.00
10726          RX  100.00  120.00  140.00  170.00  194.00  224.00  244.00  264.00
10727          RY  1054.5 1054.30 1054.00 1051.00 1051.10 1054.00 1054.30 1054.50
               *

10728          KK     S62BASIN
10729          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10730          BA   0.132
10731          LG    0.10    0.25    4.20    0.58      80
10732          UI       0     225     568     193      29       0       0       0       0       0
10733          UI       0       0       0       0       0       0       0       0       0       0
10734          UI       0       0       0       0       0       0       0       0       0       0
10735          UI       0       0       0       0       0       0       0       0       0       0
10736          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10737          KK  DS62REDIVERT
10738          KM        Additional Retention based on 100yr 2hr retention.
10739          KM        C value is based on future land use, P=2.7, A=acres
10740          DT    RS62    13.2     0.0
10741          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10742          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10743          KK   CPS62COMBINE
10744          HC       2   1.084
               *

10745          KK  S62S64ROUTE
10746          KM        Cross-section: Buckeye ADMP FCD Contract
10747          KM        No 2004C058 Conceptual Design Plans for
10748          KM        White Tanks System dated April 2009
10749          RS       7    FLOW
10750          RC   0.045   0.045   0.045    5430  0.0077    0.00
10751          RX  100.00  112.00  119.00  126.00  139.00  146.00  153.00  165.00
10752          RY  1020.0 1018.30 1017.30 1016.30 1016.20 1017.30 1018.30 1020.00
               *

10753          KK     S63BASIN
10754          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10755          BA   0.599
10756          LG    0.14    0.25    4.20    0.58      37
10757          UI       0     235     739    1345    1183     687     259     110      41       0
10758          UI       0       0       0       0       0       0       0       0       0       0
10759          UI       0       0       0       0       0       0       0       0       0       0
10760          UI       0       0       0       0       0       0       0       0       0       0
10761          UI       0       0       0       0       0       0       0       0       0       0
               *

10762          KK  DS63REDIVERT
10763          KM        Additional Retention based on 100yr 2hr retention.
10764          KM        C value is based on future land use, P=2.7, A=acres
10765          DT    RS63    12.1     0.0
10766          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10767          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10768          KK  S63S64ROUTE
10769          KM        Cross-section: Estimated 2' deep and 4:1 side
10770          KM        slopes, width based on aerial / Manning's N Value
10771          KM        clean straight earth
10772          RS       1    FLOW
10773          RC   0.022   0.022   0.022    2415  0.0046    0.00
10774          RX  100.00  120.00  140.00  152.00  155.00  167.00  179.00  191.00
10775          RY  1013.5 1012.25 1012.00 1010.00 1010.10 1012.00 1012.50 1013.50
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10776          KK     S64BASIN
10777          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10778          BA   0.475
10779          LG    0.16    0.25    4.25    0.55      67
10780          UI       0     234     712    1261     853     390     151      39      36       0
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10781          UI       0       0       0       0       0       0       0       0       0       0
10782          UI       0       0       0       0       0       0       0       0       0       0
10783          UI       0       0       0       0       0       0       0       0       0       0
10784          UI       0       0       0       0       0       0       0       0       0       0
               *

10785          KK  DS64REDIVERT
10786          KM        Additional Retention based on 100yr 2hr retention.
10787          KM        C value is based on future land use, P=2.7, A=acres
10788          DT    RS64     51.5      0.0
10789          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10790          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10791          KK   CPS64COMBINE
10792          HC       3    2.158
               *

10793          KK  S64S67ROUTE
10794          KM        Cross-section: Buckeye ADMP FCD Contract
10795          KM        No 2004C058 Conceptual Design Plans for
10796          KM        White Tanks System dated April 2009
10797          RS       1     FLOW
10798          RC   0.045    0.045    0.045     828  0.0051    0.00
10799          RX  100.00   110.00   124.00  138.00  172.00  186.00  200.00  210.00
10800          RY  1116.0 1112.60 1112.60 1110.60 1110.50 1112.60 1114.60 1116.00
               *

10801          KK     S67BASIN
10802          KM        BASIN BOUNDARY FROM 1990 TOPO
10803          BA   0.159
10804          LG    0.20     0.24     4.25     0.50      41
10805          UI       0       94      280      458     258      93      30      13       0       0
10806          UI       0        0        0        0       0       0       0       0       0       0
10807          UI       0        0        0        0       0       0       0       0       0       0
10808          UI       0        0        0        0       0       0       0       0       0       0
10809          UI       0        0        0        0       0       0       0       0       0       0
               *

10810          KK  DS67REDIVERT
10811          KM        Additional Retention based on 100yr 2hr retention.
10812          KM        C value is based on future land use, P=2.7, A=acres
10813          DT    RS67     10.8      0.0
10814          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10815          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10816          KK   CPS67COMBINE
10817          HC       2    2.317
               *

10818          KK  S6768AROUTE
10819          KM        Cross-section: Buckeye ADMP FCD Contract
10820          KM        No 2004C058 Conceptual Design Plans for
10821          KM        White Tanks System dated April 2009
10822          RS       1     FLOW
10823          RC   0.045    0.045    0.045    2578  0.0067    0.00
10824          RX  100.00   137.50   151.50  165.50  199.50  213.50  227.50  265.00
10825          RY  1000.0   998.70   996.70  994.70  994.60  996.70  998.70 1000.00
               *

10826          KK  S6768BROUTE
10827          KM        Cross-section: Buckeye ADMP FCD Contract
10828          KM        No 2004C058 Conceptual Design Plans for
10829          KM        White Tanks System dated April 2009
10830          RS       1     FLOW
10831          RC   0.045    0.045    0.045    1876  0.0053    0.00
10832          RX  100.00   134.00   148.00  162.00  198.00  212.00  226.00  260.00
10833          RY  986.00   984.40   982.40  980.40  980.30  982.40  984.40  986.00
               *

10834          KK     S68BASIN
10835          KM        BASIN BOUNDARY FROM 1990 TOPO
10836          BA   0.338
10837          LG    0.24     0.25     4.20     0.50      25
10838          UI       0       54      224      331     517     576     384     257     122      72
10839          UI      36       16       16        0       0       0       0       0       0       0
10840          UI       0        0        0        0       0       0       0       0       0       0
10841          UI       0        0        0        0       0       0       0       0       0       0
10842          UI       0        0        0        0       0       0       0       0       0       0
               *

10843          KK  DS68REDIVERT
10844          KM        Additional Retention based on 100yr 2hr retention.
10845          KM        C value is based on future land use, P=2.7, A=acres
10846          DT    RS68     10.1      0.0
10847          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10848          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10849          KK   CPS68COMBINE
10850          HC       2    2.655
               *

10851          KK  S6869AROUTE
10852          KM        Cross-section: Buckeye ADMP FCD Contract
10853          KM        No 2004C058 Conceptual Design Plans for
10854          KM        White Tanks System dated April 2009
10855          RS       2     FLOW
10856          RC   0.045    0.045    0.045    2590  0.0068    0.00
10857          RX  100.00   104.50   118.50  132.50  157.50  171.50  185.50  190.00
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10858          RY  960.00   959.40   957.40  955.40  955.30  957.40  959.40  960.00
               *

10859          KK  S6869BROUTE
10860          KM        Cross-section: Buckeye ADMP FCD Contract
10861          KM        No 2004C058 Conceptual Design Plans for
10862          KM        White Tanks System dated April 2009
10863          RS       1     FLOW
10864          RC   0.045    0.045    0.045    2590  0.0085    0.00
10865          RX  100.00   103.50   117.50  131.50  155.50  169.50  183.50  187.00
10866          RY  940.00   938.50   937.50  935.50  935.40  937.50  938.50  940.00
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                *
10867           KK     S69BASIN
10868           KM        BASIN BOUNDARY FROM 1990 TOPO
10869           BA   0.468
10870           LG    0.12     0.25     4.00     0.65       58
10871           UI       0      150      488      826     1009      610      303      134       52       29
10872           UI       0        0        0        0        0        0        0        0        0        0
10873           UI       0        0        0        0        0        0        0        0        0        0
10874           UI       0        0        0        0        0        0        0        0        0        0
10875           UI       0        0        0        0        0        0        0        0        0        0
                *

10876           KK  DS69REDIVERT
10877           KM        Additional Retention based on 100yr 2hr retention.
10878           KM        C value is based on future land use, P=2.7, A=acres
10879           DT    RS69     33.7      0.0
10880           DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
10881           DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

10882           KK   CPS69COMBINE
10883           HC       2   3.123
                *

10884           KK  S69S70ROUTE
10885           KM        Cross-section: Buckeye ADMP FCD Contract
10886           KM        No 2004C058 Conceptual Design Plans for
10887           KM        White Tanks System dated April 2009
10888           RS       2    FLOW
10889           RC   0.045    0.045    0.045     3632   0.0078     0.00
10890           RX  100.00   122.00   136.00   150.00   172.00   186.00   200.00   222.00
10891           RY  910.00   909.60   907.60   905.60   905.50   907.60   909.60   910.00
                *

10892           KK     S70BASIN
10893           KM        BASIN BOUNDARY FROM 1990 TOPO, OVERTOPPING
10894           KM        LOCATION AT LOW PT (ELEV~896)
10895           BA   0.750
10896           LG    0.14     0.25     4.50     0.48       58
10897           UI       0      401     1206     2071     1294      536      195       59        0        0
10898           UI       0        0        0        0        0        0        0        0        0        0
10899           UI       0        0        0        0        0        0        0        0        0        0
10900           UI       0        0        0        0        0        0        0        0        0        0
1                                          HEC-1 INPUT                                                      PAGE275

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

10901           UI       0        0        0        0        0        0        0        0        0        0
                *

10902           KK  DS70REDIVERT
10903           KM        Additional Retention based on 100yr 2hr retention.
10904           KM        C value is based on future land use, P=2.7, A=acres
10905           DT    RS70     80.1      0.0
10906           DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
10907           DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

10908           KK   CPS70COMBINE
10909           HC       2   3.873
                *

10910           KK  S70S71ROUTE
10911           KM        Cross-section: Buckeye ADMP FCD Contract
10912           KM        No 2004C058 Conceptual Design Plans for
10913           KM        White Tanks System dated April 2009
10914           RS       3    FLOW
10915           RC   0.030    0.030    0.030     3443   0.0012     0.00
10916           RX  100.00   107.50   121.50   135.50   160.50   174.50   188.50   196.00
10917           RY  896.00   894.90   892.90   890.90   890.80   892.90   894.90   896.00
                *

10918           KK     S71BASIN
10919           KM        BASIN BOUNDARY FROM 1990 TOPO, PONDING AT BUCKEYE CANAL
10920           KM        AND AIRPORT ROAD RESULTING IN A SPLIT FLOW
10921           BA   0.130
10922           LG    0.18     0.25     4.65     0.41       44
10923           UI       0       45      146      256      271      163       70       34       10        8
10924           UI       0        0        0        0        0        0        0        0        0        0
10925           UI       0        0        0        0        0        0        0        0        0        0
10926           UI       0        0        0        0        0        0        0        0        0        0
10927           UI       0        0        0        0        0        0        0        0        0        0
                *

10928           KK  DS71REDIVERT
10929           KM        Additional Retention based on 100yr 2hr retention.
10930           KM        C value is based on future land use, P=2.7, A=acres
10931           DT    RS71      9.8      0.0
10932           DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
10933           DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

10934           KK   CPS71COMBINE
10935           HC       2   4.003
                *

10936           KK  S71S78ROUTE
10937           KM        Cross-section: Buckeye ADMP FCD Contract
10938           KM        No 2004C058 Conceptual Design Plans for
10939           KM        White Tanks System dated April 2009
10940           RS       4    FLOW
10941           RC   0.030    0.030    0.030     3159   0.0005     0.00
1                                          HEC-1 INPUT                                                      PAGE276

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

10942           RX  100.00   117.50   131.50   145.50   181.50   195.50   209.50   227.00
10943           RY  894.00   891.50   889.50   887.50   887.40   889.50   891.50   894.00
                *

10944           KK     S78BASIN
10945           KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
10946           KM        AND OVERTOPS BUCKEYE CANAL
10947           BA   0.176
10948           LG    0.15     0.25     4.70     0.41       55
10949           UI       0       55      180      301      379      234      120       51       22       11
10950           UI       0        0        0        0        0        0        0        0        0        0
10951           UI       0        0        0        0        0        0        0        0        0        0
10952           UI       0        0        0        0        0        0        0        0        0        0
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10953          UI       0       0       0       0       0       0       0       0       0       0
               *

10954          KK  DS78REDIVERT
10955          KM        Additional Retention based on 100yr 2hr retention.
10956          KM        C value is based on future land use, P=2.7, A=acres
10957          DT    RS78    17.8     0.0
10958          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10959          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10960          KK   CPS78COMBINE
10961          HC       2   4.179
               *

10962          KK  DW61SERETRIEVE
10963          DR   DW61S
               *

10964          KK  W61S65ROUTE
10965          KM        Cross-section: Estimated 2' deep, side slopes
10966          KM        and width based on aerial and topo / Manning's
10967          KM        N Value: earth w/ sparse trees and shrubs
10968          RS      31    FLOW
10969          RC   0.032   0.032   0.032    9453  0.0077    0.00
10970          RX  100.00  135.00  170.00  186.00  336.00  352.00  372.00  392.00
10971          RY  1052.5 1052.30 1052.00 1050.00 1050.10 1052.00 1053.00 1054.00
               *

10972          KK     S65BASIN
10973          KM        BASIN BOUNDARY FROM 1990 TOPO
10974          BA   0.879
10975          LG    0.16    0.25    4.40    0.51      51
10976          UI       0     125     465     719    1005    1513    1084     775     519     241
10977          UI     160      84      38      39      39       0       0       0       0       0
10978          UI       0       0       0       0       0       0       0       0       0       0
10979          UI       0       0       0       0       0       0       0       0       0       0
10980          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10981          KK  DS65REDIVERT
10982          KM        Additional Retention based on 100yr 2hr retention.
10983          KM        C value is based on future land use, P=2.7, A=acres
10984          DT    RS65    60.7     0.0
10985          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10986          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10987          KK   CPS65COMBINE
10988          HC       2   1.268
               *

10989          KK  S65S66ROUTE
10990          KM        Cross-section: Estimated 3' deep and 4:1 side
10991          KM        slopes, width based on aerial / Manning's N
10992          KM        Value: clean straight earth
10993          RS       8    FLOW
10994          RC   0.032   0.032   0.032    6405  0.0056    0.00
10995          RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
10996          RY  1000.5  999.75  999.25  999.00  999.10  999.25  999.75 1000.50
               *

10997          KK     S66BASIN
10998          KM        SUNDANCE, RBF, 2004
10999          BA   0.655
11000          LG    0.21    0.25    3.95    0.40      35
11001          UI       0     128     481     721    1206    1035     690     415     189     108
11002          UI      34      33       0       0       0       0       0       0       0       0
11003          UI       0       0       0       0       0       0       0       0       0       0
11004          UI       0       0       0       0       0       0       0       0       0       0
11005          UI       0       0       0       0       0       0       0       0       0       0
               *

11006          KK  DS66REDIVERT
11007          KM        Sundance
11008          DT    RS66    96.2     0.0
11009          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11010          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11011          KK   CPS66COMBINE
11012          HC       2   1.923
               *

11013          KK   SRS66STORAGE
11014          KM        Ponding behind road/canal, does not incl Sundance retention values
11015          KO
11016          RS       1    STOR
11017          SV   26.50   36.70   50.00
11018          SQ          1414.00 2600.00
11019          SE  1002.0 1003.00 1003.50
11020          ST
               *
1                                          HEC-1 INPUT                                          PAGE278

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

11021          KK  S66S75ROUTE
11022          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11023          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11024          RS       1    FLOW
11025          RC   0.035   0.035   0.035    2958  0.0095    0.00
11026          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11027          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

11028          KK     S75BASIN
11029          KM        BASIN BOUNDARY FROM 1990 TOPO
11030          BA   0.339
11031          LG    0.20    0.25    4.00    0.57      43
11032          UI       0      84     293     448     711     498     314     137      77      26
11033          UI      19       0       0       0       0       0       0       0       0       0
11034          UI       0       0       0       0       0       0       0       0       0       0
11035          UI       0       0       0       0       0       0       0       0       0       0
11036          UI       0       0       0       0       0       0       0       0       0       0
```

```
                 *
11037            KK  DS75REDIVERT
11038            KM        Additional Retention based on 100yr 2hr retention.
11039            KM        C value is based on future land use, P=2.7, A=acres
11040            DT    RS75    23.8     0.0
11041            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11042            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

11043            KK   CPS75COMBINE
11044            HC       2   2.262
                 *

11045            KK  S75S76ROUTE
11046            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11047            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11048            RS       4    FLOW
11049            RC   0.035   0.035   0.035    5281  0.0081    0.00
11050            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11051            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                 *

11052            KK     S76BASIN
11053            KM        BASIN BOUNDARY FROM 1990 TOPO
11054            BA   1.006
11055            LG    0.10    0.25    4.15    0.63      80
11056            UI       0     322    1049    1776    2170    1311     650     288     111      63
11057            UI       0       0       0       0       0       0       0       0       0       0
11058            UI       0       0       0       0       0       0       0       0       0       0
11059            UI       0       0       0       0       0       0       0       0       0       0
11060            UI       0       0       0       0       0       0       0       0       0       0
                 *
1                                                HEC-1 INPUT                                                PAGE279

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

11061            KK  DS76REDIVERT
11062            KM        Additional Retention based on 100yr 2hr retention.
11063            KM        C value is based on future land use, P=2.7, A=acres
11064            DT    RS76   109.4     0.0
11065            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11066            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

11067            KK   CPS76COMBINE
11068            HC       2   3.268
                 *

11069            KK  S76S77ROUTE
11070            KM        Cross-section: Estimated 2' deep, side
11071            KM        slopes and width based on aerial / Manning's
11072            KM        N Value: clean straight earth
11073            RS       3    FLOW
11074            RC   0.022   0.022   0.022    7144  0.0052    0.00
11075            RX  100.00  103.00  106.00  116.00  148.00  158.00  178.00  198.00
11076            RY  900.00  899.00  898.00  896.00  896.10  898.00  898.10  898.20
                 *

11077            KK     S77BASIN
11078            KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
11079            BA   0.911
11080            LG    0.13    0.25    4.50    0.49      49
11081            UI       0     152     606     897    1426    1533    1030     692     318     190
11082            UI      93      45      44       0       0       0       0       0       0       0
11083            UI       0       0       0       0       0       0       0       0       0       0
11084            UI       0       0       0       0       0       0       0       0       0       0
11085            UI       0       0       0       0       0       0       0       0       0       0
                 *

11086            KK  DS77REDIVERT
11087            KM        Additional Retention based on 100yr 2hr retention.
11088            KM        C value is based on future land use, P=2.7, A=acres
11089            DT    RS77    62.0     0.0
11090            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11091            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

11092            KK   CPS77COMBINE
11093            HC       2   4.179
                 *
11094            ZZ
1
          SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

  33          N07
                .
                .
  45            .------->    RN07
  42       DN07RE
                .
                .
  50            .------->  DN07AS
  48        DN07A
                .
                .
  55            .------->  DN07BS
  53        DN07B
                .
                .
  60            .------->  DN07CS
  58        DN07C
                .
                .
  65            .------->  DN07DS
  63        DN07D
                V
                V
  68       N07N06
                .
                .
  75            .         N01
                .           .
                .           .
  88            .           .------->    RN01
```

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 85          .     DN01RE
             .        .
             .        .
 91          .        .       N02A
             .        .         .
             .        .         .
105          .        .         .-------->   RN02A
102          .        .     DN02AR
             .        .         V
             .        .         V
108          .        .     N2AN01
             .        .         .
             .        .         .
115          .     CPN01............
             .        V
             .        V
117          .     N01N02
             .        .
             .        .
125          .        .       N02
             .        .         .
             .        .         .
137          .        .         .-------->    RN02
135          .        .     DN02RE
             .        .         .
             .        .         .
140          .        .         .       N03A
             .        .         .         .
             .        .         .         .
154          .        .         .         .-------->   RN03A
151          .        .         .     DN03AR
             .        .         .         V
             .        .         .         V
157          .        .         .     N3AN02
             .        .         .         .
             .        .         .         .
163          .     CPN02........................
             .        V
             .        V
165          .     N02N3B
             .        .
             .        .
172          .        .       N03B
             .        .         .
             .        .         .
184          .        .         .-------->   RN03B
182          .        .     DN3BRE
             .        .         .
             .        .         .
187          .     CPN03B............
             .        V
             .        V
189          .     N3BN04
             .        .
             .        .
196          .        .       N04
             .        .         .
             .        .         .
206          .        .         .       N03
             .        .         .         .
             .        .         .         .
218          .        .         .         .-------->    RN03
216          .        .         .     DN03RE
             .        .         .         V
             .        .         .         V
221          .        .         .     N03N04
             .        .         .         .
             .        .         .         .
227          .        .         .         .       N04A
             .        .         .         .         .
             .        .         .         .         .
241          .        .         .         .         .-------->   RN04A
238          .        .         .         .     DN04AR
             .        .         .         .         V
             .        .         .         .         V
244          .        .         .         .     N4AN04
             .        .         .         .         .
             .        .         .         .         .
251          .        .         .         .         .       N04B
             .        .         .         .         .         .
             .        .         .         .         .         .
263          .        .         .         .         .         .-------->   RN04B
260          .        .         .         .         .     DN04BR
             .        .         .         .         .         V
             .        .         .         .         .         V
266          .        .         .         .         .     N4BN04
             .        .         .         .         .         .
             .        .         .         .         .         .
273          .     CPN04.............................................
             .        .
             .        .
277          .        .-------->    RN04
275          .     DN04RE
             .        V
             .        V
280          .     N04N05
             .        .
             .        .
286          .        .       N05
             .        .         .
             .        .         .
299          .        .         .-------->    RN05
295          .        .     DN05RE
             .        .         .
             .        .         .
303          .        .         .         .<-------  DN07AS
302          .        .         .     DN07A
             .        .         .         V
             .        .         .         V
304          .        .         .     N7AN05
             .        .         .         .
             .        .         .         .
311          .        .         .         .         .<-------  DN07BS
310          .        .         .         .     DN07B
             .        .         .         .         V
             .        .         .         .         V
312          .        .         .         .     N7BN05
             .        .         .         .         .
             .        .         .         .         .
319          .        .         .         .         .           .<-------  DN07CS
```

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318                                                  DN07C
                                                       V
                                                       V
320                                                 N7CN05
326            CPN05.............................................
                 V
                 V
328            N05N06
335                  N06
347                  .-------->    RN06
344                DN06RE
350      CPN06.......................
352              N08
361                  N10
                       V
                       V
371                N10N11
377                          N11
387                CPN11............
                       V
                       V
389                N11N09
396                          N09
405                                     N14
419                                     .-------->    RN14
416                                  DN14RE
422                CPN09........................
                       V
                       V
424                N09N18
430                          N18
440                CPN18............
                       V
                       V
442                N18N15
448                          N12
                               V
                               V
458                        N12N13
464                                     N13
474                         CPN13............
                               V
                               V
476                        N13N15
482                                     N16
495                                     .-------->    RN16
492                                  DN16RE
                                        V
                                        V
498                                  N16N15
504                                                N15
514                CPN15.................................
                       V
                       V
516                N15N17
522                          N17
532                CPN17............
534                          N20
546                                     .-------->    RN20
543                        DN20RE
                               V
                               V
549                        N20N21
556                                     N21
568                                     .-------->    RN21
565                                  DN21RE
```

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571                 CPN21............
576                 .-------> DN21S
573                 DN21SE
                    V
                    V
579                 N21N25
586                         N22
596                                   .<-------  DN21S
595                                 DN21SE
                                        V
                                        V
597                                 N21N22
604                         CPN22............
                                V
                                V
606                         N22N25
613                                     N25
626                                     .-------> RN25
623                                 DN25RE
629                 CPN25........................
                    V
                    V
631                 N25N26
638                         N26
650                         .-------> RN26
647                         DN26RE
653                 CPN26............
655                         N19
665                                     N23
678                                     .-------> RN23
675                                 DN23RE
                                        V
                                        V
681                                 N23N24
688                                             N24
701                                             .-------> RN24
698                                         DN24RE
704                                     CPN24............
706                                             N27
718                                             .-------> RN27
715                                         DN27RE
721                 DUMMY...................................
723         DUMMY...................................
725             D03
738             .-------> RD03
734         DD03RE
                V
                V
741         D03D04
748             D04
764             .-------> RD04
759         DD04RE
767         CPD04............
771             .-------> DD04S
769         DD04SE
                V
                V
774         D04D05
781             D05
793             .-------> RD05
791         DD05RE
```

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 796          .      CPD05...........
              .          V
              .          V
 798          .     D05D14
              .          .
              .          .
 807          .          .-------> DD141S
 805          .      DD141
              .          V
              .          V
 810          .     D05D15
              .          .
              .          .
 817          .          .        D11
              .          .          .
              .          .          .
 832          .          .          .------->   RD11
 827          .          .     DD11RE
              .          .          .
              .          .          .
 837          .          .          .-------> DD111S
 835          .          .      DD111
              .          .          .
              .          .          .
 842          .          .          .-------> DD112S
 840          .          .      DD112
              .          .          V
              .          .          V
 845          .          .     D11D12
              .          .          .
              .          .          .
 852          .          .          .        D12
              .          .          .          .
              .          .          .          .
 868          .          .          .          .------->   RD12
 862          .          .          .     DD12RE
              .          .          .          .
              .          .          .          .
 871          .          .      CPD12...........
              .          .          .
              .          .          .
 875          .          .          .-------> DD121S
 873          .          .      DD121
              .          .          .
              .          .          .
 880          .          .          .-------> DD122S
 878          .          .      DD122
              .          .          V
              .          .          V
 883          .          .     D12D13
              .          .          .
              .          .          .
 891          .          .          .        D13
              .          .          .          .
              .          .          .          .
 905          .          .          .          .------->   RD13
 900          .          .          .     DD13RE
              .          .          .          .
              .          .          .          .
 909          .          .          .          .          .<-------  DD04S
 908          .          .          .          .     DD04SE
              .          .          .          .          V
              .          .          .          .          V
 910          .          .          .          .     D04D13
              .          .          .          .          .
              .          .          .          .          .
 917          .          .      CPD13......................
              .          .          .
              .          .          .
 921          .          .          .-------> DD131S
 919          .          .      DD131
              .          .          .
              .          .          .
 926          .          .          .-------> DD132S
 924          .          .      DD132
              .          .          V
              .          .          V
 929          .          .     D13D14
              .          .          .
              .          .          .
 936          .          .          .        D14
              .          .          .          .
              .          .          .          .
 947          .          .          .          .------->   RD14
 945          .          .          .     DD14RE
              .          .          .          .
              .          .          .          .
 951          .          .          .          .          .<-------  DD141S
 950          .          .          .          .      DD141
              .          .          .          .          V
              .          .          .          .          V
 952          .          .          .          .     D0514A
              .          .          .          .          .
              .          .          .          .          .
 960          .          .      CPD14......................
              .          .          V
              .          .          V
 962          .          .      SRD14
              .          .          .
              .          .          .
 973          .          .          .-------> DD142S
 971          .          .      DD142
              .          .          V
              .          .          V
 976          .          .     D14D15
              .          .          .
              .          .          .
 983          .          .          .        D15
              .          .          .          .
              .          .          .          .
 995          .          .          .          .------->   RD15
 992          .          .          .     DD15RE
              .          .          .          .
              .          .          .          .
 998          .      CPD15......................
              .          V
              .          V
1000          .     D15D26
              .          V
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                    V
1007          D15D28
                    .
1014                .        D28
                    .          .
                    .          .
1026                .          .-------->    RD28
1023                .     DD28RE
                    .          .
                    .          .
1029          CPD28............
                    V
                    V
1031          D28AFR
                    .
                    .
1037                .       D26
                    .          .
                    .          .
1049                .          .-------->    RD26
1047                .     DD26RE
                    .          .
                    .          .
1053                .          .        .<-------  DD142S
1052                .          .    DD142
                    .          .       V
                    .          .       V
1054                .          .   D14D26
                    .          .       .
                    .          .       .
1061                .      CPD26............
                    .          V
                    .          V
1063                .     D26D27
                    .          .
                    .          .
1070                .          .      D27
                    .          .       .
                    .          .       .
1082                .          .       .-------->    RD27
1080                .          .   DD27RE
                    .          .       .
                    .          .       .
1085                .      CPD27............
                    .          V
                    .          V
1087                .      SRD27
                    .          V
                    .          V
1095                .     D27D42
                    .          .
                    .          .
1103                .          .      D20
                    .          .       .
                    .          .       .
1117                .          .       .-------->    RD20
1112                .          .   DD20RE
                    .          .       .
                    .          .       .
1121                .          .       .        .<-------  DD111S
1120                .          .       .    DD111
                    .          .       .       V
                    .          .       .       V
1122                .          .       .   D11D20
                    .          .       .       .
                    .          .       .       .
1129                .          .   CPD20............
                    .          .       V
                    .          .       V
1131                .          .   D20D21
                    .          .       .
                    .          .       .
1138                .          .       .      D21
                    .          .       .       .
                    .          .       .       .
1151                .          .       .       .-------->    RD21
1147                .          .       .   DD21RE
                    .          .       .       .
                    .          .       .       .
1155                .          .       .       .        .<-------  DD112S
1154                .          .       .       .    DD112
                    .          .       .       .       V
                    .          .       .       .       V
1156                .          .       .       .   D11D21
                    .          .       .       .       .
                    .          .       .       .       .
1164                .          .       .       .       .        .<-------  DD121S
1163                .          .       .       .       .    DD121
                    .          .       .       .       .       V
                    .          .       .       .       .       V
1165                .          .       .       .       .   D12D21
                    .          .       .       .       .       .
                    .          .       .       .       .       .
1172                .          .   CPD21.................................
                    .          .       .
                    .          .       .
1176                .          .       .-------> DD211S
1174                .          .   DD211
                    .          .       .
                    .          .       .
1181                .          .       .-------> DD212S
1179                .          .   DD212
                    .          .       V
                    .          .       V
1184                .          .   D21D22
                    .          .       .
                    .          .       .
1192                .          .       .      D22
                    .          .       .       .
                    .          .       .       .
1205                .          .       .       .-------->    RD22
1201                .          .       .   DD22RE
                    .          .       .       .
                    .          .       .       .
1209                .          .       .       .        .<-------  DD122S
1208                .          .       .       .    DD122
                    .          .       .       .       V
                    .          .       .       .       V
1210                .          .       .       .   D12D22
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1217          CPD22.......................
                  V
                  V
1219          D22D23
                  .
                  .
1226                  D23
                      .
                      .
1242                  .-------->    RD23
1235              DD23RE
                      .
                      .
1246                  .<-------  DD131S
1245                  .      DD131
                      .          V
                      .          V
1247                  .     D13D23
                      .          .
                      .          .
1254          CPD23.......................
                  .
                  .
1258              .-------> DD231S
1256          DD231
                  .
                  .
1263              .-------> DD232S
1261          DD232
                  V
                  V
1266          D23D24
                  .
                  .
1274                  D24
                      .
                      .
1285                  .-------->    RD24
1283              DD24RE
                      .
                      .
1289                  .<-------  DD132S
1288                  .      DD132
                      .          V
                      .          V
1290                  .     D13D24
                      .          .
                      .          .
1297          CPD24.......................
                  V
                  V
1299          D24D25
                  .
                  .
1306                  D25
                      .
                      .
1319                  .-------->    RD25
1315              DD25RE
                      .
                      .
1322          CPD25............
                  V
                  V
1324          D25D39
                  .
                  .
1332                  D39
                      .
                      .
1344                  .-------->    RD39
1341              DD39RE
                      .
                      .
1347          CPD39............
                  V
                  V
1349          D39D42
                  .
                  .
1357                  D42
                      .
                      .
1370                  .-------->    RD42
1367              DD42RE
                      .
                      .
1373      CPD42.......................
              V
              V
1375      SRD42
              V
              V
1383      D42D53
                  .
                  .
1391              D53
                  .
                  .
1402              .-------->    RD53
1400          DD53RE
                  .
                  .
1405      CPD53............
              V
              V
1407      SRD53
              V
              V
1415      D53D54
                  .
                  .
1423              D43
                  .
                  .
1434              .-------->    RD43
1432          DD43RE
                  V
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                                                  V
1437                                          D43D54
                                                  .
1444                                                  .        D54
                                                      .          .
                                                      .          .
1457                                                  .          .-------->    RD54
1454                                                  .      DD54RE
                                                      .          .
                                                      .          .
1460                                          CPD54.......................
                                                  .
1462                                                  .        D44
                                                      .          .
                                                      .          .
1475                                                  .          .-------->    RD44
1473                                                  .      DD44RE
                                                      .          .
                                                      .          .
1478                                                  .        D55
                                                      .          .
                                                      .          .
1489                                                  .          .-------->    RD55
1487                                                  .      DD55RE
                                                      .          .
                                                      .          .
1492                                                  .          .        D56
                                                      .          .          .
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1504                                                  .          .          .-------->    RD56
1501                                                  .          .      DD56RE
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1507                                          DUMMY...................................
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1509                                          .
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1509                                          DUMMY.......................
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1511                                          .        D52
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1523                                          .          .-------->    RD52
1521                                          .      DD52RE
                                              .          V
                                              .          V
1526                                          .      D52D66
                                              .          .
1534                                          .          .        D66
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1546                                          .          .          .-------->    RD66
1543                                          .          .      DD66RE
                                              .          .          .
1549                                          .      CPD66............
                                              .          V
                                              .          V
1551                                          .      D66D67
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1558                                          .          .        D67
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1571                                          .          .          .-------->    RD67
1568                                          .          .      DD67RE
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1574                                          .      CPD67............
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1576                                          .          .        D76
                                              .          .          .
1589                                          .          .          .-------->    RD76
1586                                          .          .      DD76RE
                                              .          .          V
                                              .          .          V
1592                                          .          .      D76D77
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1600                                          .          .          .        D77
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1609                                          .          .      CPD77............
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1611                                          DUMMY.......................
                                              .
1613                                          .        D35
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1624                                          .          .-------->    RD35
1622                                          .      DD35RE
                                              .          .
1628                                          .          .          .<-------  DD231S
1627                                          .          .      DD231
                                              .          .          V
                                              .          .          V
1629                                          .          .      D23D35
                                              .          .          .
1636                                          .      CPD35............
                                              .          .
1640                                          .          .-------->    DD35S
1638                                          .      DD35SE
                                              .          V
                                              .          V
1643                                          .      D35D38
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1650                                          .          .        D38
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1662          .           .           .------->    RD38
1659          .           .      DD38RE
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1666          .           .           .          .<-------  DD232S
1665          .           .           .      DD232
              .           .           .          V
              .           .           .          V
1667          .           .           .      D23D38
              .           .           .           .
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1674          .       CPD38.......................
              .           V
              .           V
1676          .      D38D40
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1683          .           .        D32
              .           .           .
              .           .           .
1696          .           .           .------->    RD32
1692          .           .      DD32RE
              .           .           .
              .           .           .
1701          .           .           .------->   DD32S
1699          .           .      DD32SE
              .           .           V
              .           .           V
1704          .           .      D32D33
              .           .           .
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1711          .           .           .        D31
              .           .           .           .
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1725          .           .           .          .------->    RD31
1720          .           .           .      DD31RE
              .           .           .           .
              .           .           .           .
1729          .           .           .           .          .<-------  DD211S
1728          .           .           .           .      DD211
              .           .           .           .          V
              .           .           .           .          V
1730          .           .           .           .      D21D31
              .           .           .           .           .
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1738          .           .           .       CPD31............
              .           .           .           V
              .           .           .           V
1740          .           .           .      D31D33
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              .           .           .           .
1747          .           .           .           .         D33
              .           .           .           .           .
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1758          .           .           .           .          .------->    RD33
1756          .           .           .           .      DD33RE
              .           .           .           .           .
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1761          .           .       CPD33.......................
              .           .           .
              .           .           .
1765          .           .           .------->  DD331S
1763          .           .       DD331
              .           .           .
              .           .           .
1770          .           .           .------->  DD332S
1768          .           .       DD332
              .           .           V
              .           .           V
1773          .           .      D33D34
              .           .           .
              .           .           .
1780          .           .           .        D34
              .           .           .           .
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1792          .           .           .          .------->    RD34
1789          .           .           .      DD34RE
              .           .           .           .
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1796          .           .           .           .          .<-------  DD212S
1795          .           .           .           .      DD212
              .           .           .           .          V
              .           .           .           .          V
1797          .           .           .           .      D21D34
              .           .           .           .           .
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1804          .           .       CPD34.......................
              .           .           V
              .           .           V
1806          .           .      D34D36
              .           .           .
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1813          .           .           .        D36
              .           .           .           .
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1825          .           .           .          .------->    RD36
1822          .           .           .      DD36RE
              .           .           .           .
              .           .           .           .
1829          .           .           .           .          .<-------   DD35S
1828          .           .           .           .      DD35SE
              .           .           .           .           V
              .           .           .           .           V
1830          .           .           .           .      D35D36
              .           .           .           .           .
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1837          .           .       CPD36.......................
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              .           .           .
1841          .           .           .------->  DD361S
1839          .           .       DD361
              .           .           .
              .           .           .
1846          .           .           .------->  DD362S
1844          .           .       DD362
              .           .           V
              .           .           V
1849          .           .      D36D40
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1856                                  D40
                                       .
1868                                   .-------->    RD40
1865                             DD40RE
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1871                   CPD40.......................
                          V
                          V
1873                   D4049A
                          V
                          V
1880                   D4049B
                          .
1887                          D47
                               .
1900                           .-------->    RD47
1896                       DD47RE
                               .
1904                           .<--------   DD32S
1903                             DD32SE
                                     V
                                     V
1905                             D3247A
                                     V
                                     V
1912                             D3247B
                                       .
1920                                   .           .<--------  DD331S
1919                                   .       DD331
                                       .           V
                                       .           V
1921                                   .      D3347A
                                       .           V
                                       .           V
1928                                   .      D3347B
                                       .           .
1935                       CPD47.......................
                               .
1939                           .-------->   DD47S
1937                       DD47SE
                               V
                               V
1942                       D47D48
                               .
1949                           .         D48
                                       .
1961                                   .-------->    RD48
1958                             DD48RE
                                       .
1965                                   .           .<--------  DD332S
1964                                   .       DD332
                                       .           V
                                       .           V
1966                                   .      D33D48
                                       .           .
1974                                   .           .           .<--------  DD361S
1973                                   .           .       DD361
                                       .           .           V
                                       .           .           V
1975                                   .           .      D3648A
                                       .           .           V
                                       .           .           V
1982                                   .           .      D3648B
                                       .           .           .
1989                       CPD48.....................................
                               .
1993                           .-------->  DD481S
1991                       DD481
                               .
1998                           .-------->  DD482S
1996                       DD482
                               V
                               V
2001                       D48D49
                               .
2008                           .         D49
                                       .
2021                                   .-------->    RD49
2017                             DD49RE
                                       .
2025                                   .           .<--------  DD362S
2024                                   .       DD362
                                       .           V
                                       .           V
2026                                   .      D36D49
                                       .           .
2033                   CPD49.....................................
                          V
                          V
2035                   D49D63
                          .
2042                          D60
                               .
2055                           .-------->    RD60
2052                       DD60RE
                               .
2059                                   .<--------  DD481S
2058                                   .      DD481
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                                                  V
                                                  V
2060                                        D48D60
                                                  .
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2068                                  CPD60............
                                          V
                                          V
2070                                  D60D63
                                          .
                                          .
2077                                          D63
                                                  .
                                                  .
2091                                              .------->    RD63
2088                                        DD63RE
                                                  .
                                                  .
2095                                              .          .<-------  DD482S
2094                                              .      DD482
                                                  .          V
                                                  .          V
2096                                              .      D48D63
                                                  .          .
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2103                          CPD63.................................
                                  V
                                  V
2105                          SRD63
                                  V
                                  V
2113                          D63D64
                                  .
                                  .
2120                                      D62
                                          .
                                          .
2133                                      .------->    RD62
2130                                  DD62RE
                                          .
                                          .
2138                                      .------->  DD621S
2136                                  DD621
                                          .
                                          .
2143                                      .------->  DD622S
2141                                  DD622
                                          V
                                          V
2146                                  D62D64
                                          .
                                          .
2155                                          D64
                                                  .
                                                  .
2167                                              .------->    RD64
2164                                        DD64RE
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2170                          CPD64......................
                                  V
                                  V
2172                          D64D74
                                  .
                                  .
2179                                    D73A
                                          .
                                          .
2191                                      .------->   RD73A
2188                                  DD73AR
                                          .
                                          .
2195                                      .          .<-------  DD621S
2194                                      .      DD621
                                          .          V
                                          .          V
2196                                      .      D6273A
                                          .          .
                                          .          .
2203                                  CPD73A............
                                          V
                                          V
2205                                  D73A74
                                          .
                                          .
2212                                      .        D74
                                                  .
                                                  .
2224                                              .------->    RD74
2221                                        DD74RE
                                                  .
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2228                                              .          .<-------  DD622S
2227                                              .      DD622
                                                  .          V
                                                  .          V
2229                                              .      D62D74
                                                  .          .
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2236                          CPD74.................................
                                  V
                                  V
2238                          SRD74
                                  .
                                  .
2246                                    D78A
                                          .
                                          .
2258                                      .------->   RD78A
2255                                  DD78AR
                                          .
                                          .
2261                          CPD78A............
                                  V
                                  V
2263                          D78ACP
                                  .
                                  .
2270                                      D41
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2282                    ..------->   RD41
2279                DD41RE
                        V
                        V
2285                D41D50
                        .
2292                    .        D50
                        .          .
2304                    .          .------->   RD50
2301                    .     DD50RE
                        .          .
                        .          .
2307                 CPD50............
                        V
                        V
2309                D5064A
                        .
2316                    .       D64A
                        .          .
2328                    .          .------->   RD64A
2325                    .     DD64AR
                        .          .
                        .          .
2331                CPD64A............
                        V
                        V
2333                64A74A
                        .
2341                    .       D74A
                        .          .
2353                    .          .------->   RD74A
2350                    .     DD74AR
                        .          .
                        .          .
2356                CPD74A............
                        V
                        V
2358                D74A78
                        .
2365            CP7874............
                    V
                    V
2367            78A78B
                    .
2374                 D06
                        .
2385                    .------->   RD06
2383                DD06RE
                        .
                        .
2391                    .------->   DD06S
2388                DD06SE
                        V
                        V
2394                D06D07
                        .
2402                    .        D07
                        .          .
2413                    .          .------->   RD07
2411                    .     DD07RE
                        .          .
                        .          .
2416                 CPD07............
                        V
                        V
2418                D07D02
                        .
2425                    .        D01
                        .          .
2436                    .          .------->   RD01
2434                    .     DD01RE
                        .          V
                        .          V
2439                    .     D01D02
                        .          .
2446                    .          .        D02
                        .          .          .
2457                    .          .          .------->   RD02
2455                    .          .     DD02RE
                        .          .          .
                        .          .          .
2460                 CPD02........................
                        V
                        V
2462                D02D10
                        .
2470                    .        D09
                        .          .
2481                    .          .------->   RD09
2479                    .     DD09RE
                        .          V
                        .          V
2484                    .     D09D10
                        .          .
2492                    .          .          .<-------   DD06S
2491                    .          .     DD06SE
                        .          .          V
                        .          .          V
2493                    .          .     D06D10
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2499                                                  D10
                                                       .
2514                                                   .-------> RD10
2509                                             DD10RE
                                                       .
2517                 CPD10.................................
                        V
                        V
2519                 D10D19
                        .
2527                        D08
                            .
                            .
2541                        .-------> RD08
2536                     DD08RE
                            V
                            V
2544                     D08D16
                            .
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2551                            D16
                                .
                                .
2565                            .-------> RD16
2562                         DD16RE
                                .
                                .
2568                      CPD16............
                            .
                            .
2572                        .-------> DD161S
2570                      DD161
                            .
                            .
2577                        .-------> DD162S
2575                      DD162
                            V
                            V
2580                     D16D18
                            .
                            .
2587                            D18
                                .
                                .
2598                            .-------> RD18
2596                         DD18RE
                                .
                                .
2601                      CPD18............
                            V
                            V
2603                     D18D19
                            .
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2610                            D17
                                .
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2622                            .-------> RD17
2619                         DD17RE
                                V
                                V
2625                         D17D19
                                .
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2633                                    D19
                                         .
2650                                     .-------> RD19
2642                                 DD19RE
                                         .
2653                 CPD19.................................
                        V
                        V
2655                 D19D30
                        .
2662                        D29
                            .
                            .
2675                        .-------> RD29
2672                     DD29RE
                            .
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2679                            .<------- DD161S
2678                          DD161
                                V
                                V
2680                         D16D29
                                .
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2687                      CPD29............
                            V
                            V
2689                     D29D30
                            .
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2696                            D30
                                .
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2710                            .-------> RD30
2707                         DD30RE
                                .
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2714                                     .<------- DD162S
2713                                   DD162
                                         V
                                         V
2715                                 D16D30
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2722                 CPD30.................................
                        V
                        V
2724                 D30D46
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2731                    D45
                         .
2744                     .-------> RD45
2741                DD45RE
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2749                     .-------> DD451S
2747                 DD451
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2754                     .-------> DD452S
2752                 DD452
                         V
                         V
2757                D45D46
                         .
2764                     .       D46
                         .        .
2777                     .        .-------> RD46
2774                     .     DD46RE
                         .        .
                         .        .
2780            CPD46.......................
                    V
                    V
2782            D46D58
                    .
                    .
2791                .-------> SSPILL
2789            RMSBSN
                    .
                    .
2795                     .<------- SSPILL
2794                RMSBSN
                         V
                         V
2796                SRREEM
                         .
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2804            CPRMS............
                    V
                    V
2806             RRMS
                    .
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2812                    D57
                         .
2825                     .-------> RD57
2822                DD57RE
                         .
                         .
2829                     .        .<------- DD451S
2828                     .     DD451
                         .        V
                         .        V
2830                     .     D45D57
                         .        .
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2837                 CPD57............
                         V
                         V
2839                D57D58
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2846                     .       D58
                         .        .
2859                     .        .-------> RD58
2856                     .     DD58RE
                         .        .
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2863                     .        .        .<------- DD452S
2862                     .        .     DD452
                         .        .        V
                         .        .        V
2864                     .        .     D45D58
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2871            CPD58...................................
                    V
                    V
2873            D5869A
                    .
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2881                    D68A
                         .
2893                     .-------> RD68A
2890                DD68AR
                         V
                         V
2896                68A69A
                         .
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2903                     .       D69A
                         .        .
2915                     .        .-------> RD69A
2912                     .     DD69AR
                         .        .
                         .        .
2918            CPD69A.......................
                    V
                    V
2920            D69A70
                    .
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2927                    D68
                         .
2940                     .-------> RD68
2937                DD68RE
                         .
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2945                     .-------> DD681S
2943                 DD681
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                                                  .
2950                                              .-------> DD682S
2948                                       DD682
                                               V
                                               V
2953                                       D68D69
                                                  .
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2960                                               D69
                                                  .
                                                  .
2972                                              .------->    RD69
2969                                              .     DD69RE
                                                  .
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2975                                       CPD69............
                                                  .
                                                  .
2979                                              .-------> DD691S
2977                                       DD691
                                                  .
                                                  .
2984                                              .-------> DD692S
2982                                       DD692
                                               V
                                               V
2987                                       D69D70
                                                  .
                                                  .
2994                                               D70
                                                  .
                                                  .
3006                                              .------->    RD70
3003                                              .     DD70RE
                                                  .
                                                  .
3009                                              .        D70A
                                                  .          .
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3021                                              .          .------->   RD70A
3018                                              .      DD70AR
                                                  .          V
                                                  .          V
3024                                              .      D70A70
                                                  .          .
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3031                                   CPD70.....................................
                                            V
                                            V
3033                                   SRD70
                                            V
                                            V
3041                                  D70D71
                                                  .
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3049                                           D71
                                                  .
                                                  .
3061                                              .------->    RD71
3058                                       DD71RE
                                                  .
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3064                                   CPD71............
                                            V
                                            V
3066                                  D71D72
                                                  .
                                                  .
3074                                           D59
                                                  .
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3087                                              .------->    RD59
3084                                       DD59RE
                                                  .
                                                  .
3091                                              .<-------   DD47S
3090                                              .     DD47SE
                                                  .          V
                                                  .          V
3092                                              .     D47D59
                                                  .          .
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3099                                       CPD59............
                                                  .
                                                  .
3103                                              .------->   DD59S
3101                                       DD59SE
                                               V
                                               V
3106                                       D59D61
                                                  .
                                                  .
3113                                               D61
                                                  .
                                                  .
3126                                              .------->    RD61
3123                                              .     DD61RE
                                                  .
                                                  .
3129                                       CPD61............
                                               V
                                               V
3131                                       D6172A
                                                  .
                                                  .
3138                                              .       D71A
                                                  .          .
                                                  .          .
3150                                              .------->   RD71A
3147                                              .     DD71AR
                                                  .          .
                                                  .          .
3154                                              .          .<-------   DD59S
3153                                              .      DD59SE
                                                  .          V
                                                  .          V
3155                                              .      D5971A
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3162                                  CPD71A............
                                          V
                                          V
3164                                  71A72A
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                                          .
3171                                      .        D72A
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3183                                      .          .-------> RD72A
3180                                      .     DD72AR
                                          .          .
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3186                              CPD72A.......................
                                      V
                                      V
3188                              D72A72
                                      .
                                      .
3195                                  .        D72
                                      .          .
                                      .          .
3209                                  .          .-------> RD72
3206                                  .     DD72RE
                                      .          .
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3212                          CPD72.......................
                                  V
                                  V
3214                          D72D73
                                  .
                                  .
3222                              .        D73
                                  .          .
                                  .          .
3234                              .          .-------> RD73
3231                              .     DD73RE
                                  .          .
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3237                          CPD73............
                                  V
                                  V
3239                          D73D78
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                                  .
3247                              .        B02
                                  .          .
                                  .          .
3258                              .          .-------> RB02
3256                              .     DB02RE
                                  .          .
                                  .          .
3264                              .          .-------> DB02LR
3261                              .     DB02SD
                                  .          .
                                  .          .
3267                              .        B04
                                  .          .
                                  .          .
3281                              .          .-------> RB04
3277                              .     DB04RE
                                  .          V
                                  .          V
3284                              .     B04B02
                                  .          .
                                  .          .
3291                              .          .       .<------- DB02LR
3290                              .          .  DB02SD
                                  .          .       .
                                  .          .       .
3292                              .      CPB02............
                                  .          .
                                  .          .
3298                              .          .-------> LR02LR
3294                              .     LR02SD
                                  .          V
                                  .          V
3301                              .     LR2D78
                                  .          .
                                  .          .
3309                              .          .       D78B
                                  .          .         .
                                  .          .         .
3321                              .          .       .-------> RD78B
3318                              .          .  DD78BR
                                  .          .       .
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3324                      CPD78B...............................
                              V
                              V
3326                      78B79B
                              .
                              .
3333                          .        D51
                              .          .
                              .          .
3344                          .-------> RD51
3342                          .     DD51RE
                              .          V
                              .          V
3347                          .     D51D65
                              .          .
                              .          .
3354                          .        D65
                              .          .
                              .          .
3366                          .          .-------> RD65
3363                          .     DD65RE
                              .          .
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3369                          .     CPD65............
                              .          V
                              .          V
3371                          .     D65D75
                              .          .
                              .          .
3378                          .        D79A
                              .          .
                              .          .
3390                          .          .-------> RD79A
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3387                                  DD79AR
                                        .
3393                                    .        D75
                                        .          .
3406                                    .          .-------->   RD75
3403                                    .     DD75RE
                                        .          .
3409                            CPD75.......................
                                    V
                                    V
3411                            SRD75
                                    V
                                    V
3420                           D7579B
                                    .
3427                                .       D79B
                                    .         .
3440                                .         .-------->   RD79B
3437                                .     DD79BR
                                    .         .
3443                       CPD79B.......................
                                V
                                V
3445                       D79B80
                                .
3453                            .       D80
                                .         .
3465                            .         .-------->   RD80
3462                           DD80RE
                                .         .
3468                        CPD80............
                                .
3470                            .       B01
                                .         .
3480                   DUMMY........................
                                .
3482                          B03
                                .
3495                          .-------->   RB03
3492                       DB03RE
                                V
                                V
3498                       B03B05
                                .
3504                            .       B05
                                .         .
3517                            .         .-------->   RB05
3514                           DB05RE
                                .         .
3520                        CPB05............
                                V
                                V
3522                       B05B06
                                .
3529                            .       B06
                                .         .
3541                            .         .-------->   RB06
3538                           DB06RE
                                .         .
3544                        CPB06............
                                V
                                V
3546                       B06B15
                                .
3553                            .       B07
                                .         .
3566                            .         .-------->   RB07
3563                           DB07RE
                                .         V
                                .         V
3569                           B07B09
                                .         .
3576                            .       B08
                                .         .
3590                            .         .-------->   RB08
3586                            .     DB08RE
                                .         V
                                .         V
3593                            .     B08B09
                                .         .
3600                            .         .       B09
                                .         .         .
3613                            .         .         .-------->   RB09
3609                            .         .     DB09RE
                                .         .         .
3616                            .       CPB09.......................
                                .         V
                                .         V
3618                            .       SRB11
                                .         V
                                .         V
3627                            .       B09B11
                                .         .
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3634                B10
                     .
3648                 .-------->    RB10
3643            DB10RE
                     V
                     V
3651            B1011A
                     V
                     V
3658            B1011B
                     .
                     .
3665                 .        B11
                     .          .
3678                 .          .-------->    RB11
3674                 .     DB11RE
                     .          .
                     .          .
3681            CPB11.......................
                     V
                     V
3683            B11B12
                     .
                     .
3690                 .        B12
                     .          .
3702                 .          .-------->    RB12
3700            DB12RE
                     .          .
                     .          .
3705            CPB12............
                     V
                     V
3707            B12B14
                     .
                     .
3714                 .        B13
                     .          .
3727                 .          .-------->    RB13
3724            DB13RE
                     V
                     V
3730            B13B14
                     .
                     .
3737                 .        B14
                     .          .
3750                 .          .-------->    RB14
3746                 .     DB14RE
                     .          .
                     .          .
3753            CPB14........................
                     V
                     V
3755            B14B15
                     .
                     .
3762                 .        B15
                     .          .
3771        CPB15........................
                     .
                     .
3773                 B16
                     .
                     .
3784                 .-------->    RB16
3782            DB16RE
                     V
                     V
3787            B16B17
                     .
                     .
3794                 .        B17
                     .          .
3806                 .          .-------->    RB17
3804            DB17RE
                     .          .
                     .          .
3809            CPB17............
                     V
                     V
3811            B17B18
                     .
                     .
3818                 .        B18
                     .          .
3830                 .          .-------->    RB18
3828            DB18RE
                     .          .
                     .          .
3833            CPB18............
                     V
                     V
3835            B18B19
                     .
                     .
3842                 .        B19
                     .          .
3851            CPB19............
                     .
                     .
3853                 .        B20
                     .          .
3862       DUMMY.................................
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                     .
3864            B21
                     .
                     .
3875                 .-------->    RB21
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3873          .      DB21RE
              .          V
              .          V
3878          .      B21B22
              .          .
              .          .
3885          .          .         B22
              .          .          .
              .          .          .
3897          .          .          .-------->    RB22
3894          .          .     DB22RE
              .          .          .
              .          .          .
3900          .      CPB22............
              .          .
              .          .
3902          .          .         B23
              .          .          .
              .          .          .
3914          .          .          .-------->    RB23
3911          .          .     DB23RE
              .          .          V
              .          .          V
3917          .          .     B23B24
              .          .          .
              .          .          .
3924          .          .          .         B24
              .          .          .          .
              .          .          .          .
3936          .          .          .          .-------->    RB24
3933          .          .          .     DB24RE
              .          .          .          .
              .          .          .          .
3939          .          .      CPB24............
              .          .          V
              .          .          V
3941          .          .     B24B25
              .          .          .
              .          .          .
3948          .          .          .         B25
              .          .          .          .
              .          .          .          .
3960          .          .          .          .-------->    RB25
3957          .          .          .     DB25RE
              .          .          .          .
              .          .          .          .
3963          .          .      CPB25............
              .          .          .
              .          .          .
3965          .          .          .         B26
              .          .          .          .
              .          .          .          .
3978          .          .          .          .-------->    RB26
3974          .          .          .     DB26RE
              .          .          .          V
              .          .          .          V
3981          .          .          .     B26B27
              .          .          .          .
              .          .          .          .
3988          .          .          .          .         B27
              .          .          .          .          .
              .          .          .          .          .
3997          .          .          .      CPB27............
              .          .          .          .
              .          .          .          .
3999      DUMMY.................................
              .
              .
4001          .         B76
              .          .
              .          .
4012          .          .-------->    RB76
4010          .      DB76RE
              .          V
              .          V
4015          .      B7676A
              .          .
              .          .
4022          .          .         B75
              .          .          .
              .          .          .
4035          .          .          .-------->    RB75
4031          .          .     DB75RE
              .          .          V
              .          .          V
4038          .          .     B75A75
              .          .          .
              .          .          .
4045          .          .          .         B75A
              .          .          .          .
              .          .          .          .
4054          .          .     CPB75A............
              .          .          V
              .          .          V
4056          .          .     B7576A
              .          .          .
              .          .          .
4063          .          .          .         B76A
              .          .          .          .
              .          .          .          .
4072          .      CPB76A........................
              .          V
              .          V
4074          .      B76A78
              .          .
              .          .
4082          .          .         B77
              .          .          .
              .          .          .
4094          .          .          .-------->    RB77
4091          .          .     DB77RE
              .          .          V
              .          .          V
4097          .          .     B77B78
              .          .          .
              .          .          .
4104          .          .          .         B78
              .          .          .          .
              .          .          .          .
4115          .          .          .          .-------->    RB78
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4113                                  DB78RE
                                        .
                                        .
4118                            CPB78A............
                                        .
                                        .
4123                                    .-------> RB78BN
4120                            DB78BN
                                        .
                                        .
4126                      CPB78B............
                                V
                                V
4128                      B78B79
                                .
                                .
4135                                B79
                                    .
                                    .
4147                                .------->   RB79
4145                            DB79RE
                                    .
                                    .
4150                       CPB79............
                                V
                                V
4152                      B79B80
                                .
                                .
4159                                B80
                                    .
                                    .
4170                                .------->   RB80
4168                            DB80RE
                                    .
                                    .
4173                       CPB80............
                                V
                                V
4175                       SRB80
                                V
                                V
4183                      B80B81
                                .
                                .
4190                                B81
                                    .
                                    .
4201                                .------->   RB81
4199                            DB81RE
                                    .
                                    .
4204                       CPB81............
                                V
                                V
4206                       SRB81
                                V
                                V
4214                      B81B84
                                .
                                .
4222                                B82
                                    .
                                    .
4233                                .------->   RB82
4231                            DB82RE
                                    V
                                    V
4236                            B82B83
                                    .
                                    .
4243                                    B83
                                        .
                                        .
4254                                    .------->   RB83
4252                                DB83RE
                                        .
                                        .
4257                            CPB83............
                                    V
                                    V
4259                            SRB83
                                    V
                                    V
4267                            B83B84
                                    .
                                    .
4274                                    B71
                                        .
                                        .
4288                                    .------->   RB71
4284                                DB71RE
                                        V
                                        V
4291                                B71B72
                                        .
                                        .
4298                                        B72
                                            .
                                            .
4309                                        .------->   RB72
4307                                    DB72RE
                                            .
                                            .
4312                                CPB72............
                                        V
                                        V
4314                                B72B74
                                        .
                                        .
4321                                        B73
                                            .
                                            .
4332                                        .------->   RB73
4330                                    DB73RE
                                            V
                                            V
4335                                    SRB73
                                            V
                                            V
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4343                                  B73B74
                                        .
4350                                    .        B74
                                        .          .
4361                                    .          .-------->   RB74
4359                                    .     DB74RE
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4364                                CPB74.......................
                                        V
                                        V
4366                                SRB74
                                        V
                                        V
4374                                B74B84
                                        .
4381                                    .        B84
                                        .
4392                                    .          .-------->   RB84
4390                                    .     DB84RE
                                        .
4395                          CPB84.................................
                                  V
                                  V
4397                          SRB84
                                  .
4406                                .        B28
                                    .
4417                                .-------->   RB28
4415                                .     DB28RE
                                    .
4420                                .        B29
                                    .
4434                                .          .-------->   RB29
4430                                .     DB29RE
                                    .
4437                                .        B30
                                    .
4450                                .          .-------->   RB30
4446                                .     DB30RE
                                    .        V
                                    .        V
4453                                .     SRB30
                                    .
4461                                .        B31
                                    .          .
4475                                .          .-------->   RB31
4470                                .     DB31RE
                                    .        V
                                    .        V
4478                                .     SRB31
                                    .          .
4486                                .     DUMMY............
                                    .
4488                  DUMMY.............................................
                                    .
4490                          B32
                                  .
4506                              .-------->   RB32
4501                          DB32RE
                                  V
                                  V
4509                          SRB32
                                  V
                                  V
4517                          B32B33
                                  .
4524                              .        B33
                                  .
4536                              .-------->   RB33
4533                              .     DB33RE
                                  .
4539                          CPB33............
                                  .
4541                              .        B34
                                  .
4553                              .-------->   RB34
4550                              .     DB34RE
                                  .
4556                              .        B38
                                  .
4567                              .          .-------->   RB38
4565                              .     DB38RE
                                  .        V
                                  .        V
4570                              .     B38B39
                                  .
4577                              .        B37
                                  .
4589                              .          .-------->   RB37
4586                              .     DB37RE
                                  .        V
                                  .        V
4592                              .     B37B39
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4599                                                  B39
                                                       .
4612                                                   .-------> RB39
4609                                                DB39RE
                                                       .
4615                                        CPB39.......................
                                                V
                                                V
4617                                        SRB39
                                                .
4625                                                B35
                                                  .
4638                                                .-------> RB35
4635                                            DB35RE
                                                  .
4641                                                B36
                                                  .
4654                                                .-------> RB36
4651                                            DB36RE
                                                  .
4657                                    DUMMY...................................
                                                .
4659                    DUMMY.......................
                                                .
4661                        B40
                              .
                              .
4675                          .-------> RB40
4672                    DB40RE
                              .
                              .
4679                          .<------- DD681S
4678                          .     DD681
                              .         V
                              .         V
4680                          .     D68B40
                              .         .
                              .         .
4687                    CPB40............
                              .
                              .
4691                          .-------> DB401S
4689                    DB401
                              .
                              .
4696                          .-------> DB402S
4694                    DB402
                          V
                          V
4699                    B40B41
                              .
                              .
4706                          .     B41
                              .       .
                              .       .
4719                          .       .-------> RB41
4716                          .   DB41RE
                              .       .
                              .       .
4723                          .       .<------- DD682S
4722                          .       .     DD682
                              .       .         V
                              .       .         V
4724                          .       .     D68B41
                              .       .         .
                              .       .         .
4732                          .       .         .<------- DD691S
4731                          .       .       DD691
                              .       .         V
                              .       .         V
4733                          .       .       D69B41
                              .       .         .
                              .       .         .
4740                    CPB41...................................
                              .
                              .
4744                          .-------> DB41S
4742                    DB41SE
                          V
                          V
4747                    B41B43
                              .
                              .
4754                          .     B43
                              .       .
                              .       .
4766                          .       .-------> RB43
4763                          .   DB43RE
                              .       .
                              .       .
4770                          .       .<------- DD692S
4769                          .       .     DD692
                              .       .         V
                              .       .         V
4771                          .       .     D69B43
                              .       .         .
                              .       .         .
4778                    CPB43.......................
                          V
                          V
4780                    B43B45
                              .
                              .
4787                          .     B44
                              .       .
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4800                          .       .-------> RB44
4797                          .   DB44RE
                              .       .
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4804                                  .<-------  DB401S
4803                            DB401
                                    V
                                    V
4805                           B40B44
                                    .
                                    .
4813                      CPB44............
                                    .
                                    .
4817                                .------->  DB441S
4815                      DB441
                                    .
                                    .
4822                                .------->  DB442S
4820                      DB442
                                  V
                                  V
4825                     B44B45
                                    .
                                    .
4832                                .        B45
                                    .          .
                                    .          .
4844                                .          .------->    RB45
4841                           DB45RE
                                    .          .
                                    .          .
4848                                .          .          .<-------  DB402S
4847                                .          .       DB402
                                    .          .          V
                                    .          .          V
4849                                .          .      B40B45
                                    .          .          .
                                    .          .          .
4857                                .          .          .          .<-------   DB41S
4856                                .          .          .      DB41SE
                                    .          .          .          V
                                    .          .          .          V
4858                                .          .          .      B41B45
                                    .          .          .          .
                                    .          .          .          .
4865                  CPB45.............................................
                                  V
                                  V
4867                  B45B47
                                    .
                                    .
4874                                .        L01
                                    .          .
                                    .          .
4885                                .------->    RL01
4883                     DL01RE
                                  V
                                  V
4888                     L01L03
                                    .
                                    .
4896                                .        L03
                                    .          .
                                    .          .
4907                                .          .------->    RL03
4905                           DL03RE
                                    .          .
                                    .          .
4910                                .          .        L20
                                    .          .          .
                                    .          .          .
4922                                .          .          .------->    RL20
4920                                .          .      DL20RE
                                    .          .          V
                                    .          .          V
4925                                .          .      L20L03
                                    .          .          .
                                    .          .          .
4933                      CPL03......................
                                    .
                                    .
4938                                .------->   DL03S
4935                     DL03SE
                                  V
                                  V
4941                     L03L04
                                    .
                                    .
4948                                .        L04
                                    .          .
                                    .          .
4959                                .          .------->    RL04
4957                           DL04RE
                                    .          .
                                    .          .
4962                      CPL04............
                                    .
                                    .
4966                                .------->   DL04S
4964                     DL04SE
                                  V
                                  V
4969                     L04L05
                                    .
                                    .
4976                                .        L02
                                    .          .
                                    .          .
4987                                .          .------->    RL02
4985                           DL02RE
                                    .          V
                                    .          V
4990                           L02L05
                                    .          .
                                    .          .
4997                                .          .        L05
                                    .          .          .
                                    .          .          .
5010                                .          .          .------->    RL05
5006                                .          .      DL05RE
                                    .          .          .
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5013                CPL05.......................
                        V
                        V
5015            L05L09
                        .
                        .
5022                    .         L09
                        .           .
                        .           .
5035                    .           .-------->    RL09
5031                    .     DL09RE
                        .           .
                        .           .
5038                CPL09............
                        V
                        V
5040            L0913B
                        .
                        .
5050                    .-------->  DL13BR
5048            DL13BN
                        .
                        .
5054                    .           .<-------  DL13BR
5053                    .     DL13BN
                        .           V
                        .           V
5055                    .     SRL13B
                        .           .
                        .           .
5064            CPL13B............
                        V
                        V
5066            L13B13
                        .
                        .
5074                    .         L13
                        .           .
                        .           .
5087                    .           .-------->    RL13
5084                    .     DL13RE
                        .           .
                        .           .
5090                    .           .         L06
                        .           .           .
                        .           .           .
5118                    .           .           .-------->    RL06
5099                    .           .     DL06RE
                        .           .           .
                        .           .           .
5123                    .           .           .-------->   DL06S
5121                    .           .     DL06SE
                        .           .           V
                        .           .           V
5126                    .           .     L06L07
                        .           .           .
                        .           .           .
5133                    .           .           .         L07
                        .           .           .           .
                        .           .           .           .
5155                    .           .           .           .-------->    RL07
5142                    .           .           .     DL07RE
                        .           .           .           .
                        .           .           .           .
5159                    .           .           .           .           .<-------   DL03S
5158                    .           .           .           .     DL03SE
                        .           .           .           .           V
                        .           .           .           .           V
5160                    .           .           .           .     L0307A
                        .           .           .           .           V
                        .           .           .           .           V
5168                    .           .           .           .     L0307B
                        .           .           .           .           .
                        .           .           .           .           .
5175                    .           .     CPL07.......................
                        .           .           .
                        .           .           .
5179                    .           .           .-------->   DL07S
5177                    .           .     DL07SE
                        .           .           V
                        .           .           V
5182                    .           .     L07L08
                        .           .           .
                        .           .           .
5189                    .           .           .         L08
                        .           .           .           .
                        .           .           .           .
5205                    .           .           .           .-------->    RL08
5198                    .           .           .     DL08RE
                        .           .           .           .
                        .           .           .           .
5209                    .           .           .           .           .<-------   DL04S
5208                    .           .           .           .     DL04SE
                        .           .           .           .           V
                        .           .           .           .           V
5210                    .           .           .           .     L04L08
                        .           .           .           .           .
                        .           .           .           .           .
5217                    .           .     CPL08.......................
                        .           .           V
                        .           .           V
5219                    .           .     L08L12
                        .           .           .
                        .           .           .
5226                    .           .           .         L10
                        .           .           .           .
                        .           .           .           .
5242                    .           .           .           .-------->    RL10
5236                    .           .           .     DL10RE
                        .           .           .           V
                        .           .           .           V
5245                    .           .           .     L10L11
                        .           .           .           .
                        .           .           .           .
5253                    .           .           .           .           .<-------   DL06S
5252                    .           .           .           .     DL06SE
                        .           .           .           .           V
                        .           .           .           .           V
5254                    .           .           .           .     L06L11
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5261                                                                                L11
                                                                                     .
5276                                                                                 .-------->   RL11
5271                                                                            DL11RE
                                                                                     .
5280                                                                                 .<-------   DL07S
5279                                                                                 .     DL07SE
                                                                                     .         V
                                                                                     .         V
5281                                                                                 .     L07L11
                                                                                     .         .
                                                                                     .         .
5289                                                                        CPL11.................................
                                                                                 .
                                                                                 .
5293                                                                             .-------->   DL11S
5291                                                                        DL11SE
                                                                                 V
                                                                                 V
5296                                                                        L11L12
                                                                                 .
                                                                                 .
5303                                                                             .        L12
                                                                                 .         .
                                                                                 .         .
5315                                                                             .         .-------->   RL12
5312                                                                             .     DL12RE
                                                                                 .         .
                                                                                 .         .
5318                                                                    CPL12.......................
                                                                             .
                                                                             .
5322                                                                         .-------->  DL121S
5320                                                                    DL121
                                                                             .
                                                                             .
5327                                                                         .-------->  DL122S
5325                                                                    DL122
                                                                         V
                                                                         V
5330                                                                   L12L13
                                                                             .
                                                                             .
5337                                                   CPL13.......................
                                                           V
                                                           V
5339                                                   L13DS5
                                                           V
                                                           V
5347                                                   DS5L19
                                                           .
                                                           .
5355                                                       .        L14
                                                           .         .
                                                           .         .
5367                                                       .-------->   RL14
5364                                                       .     DL14RE
                                                           .         V
                                                           .         V
5370                                                       .     L14L15
                                                           .         .
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5377                                                       .         .        L15
                                                           .         .         .
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5389                                                       .         .-------->   RL15
5386                                                       .         .     DL15RE
                                                           .         .         .
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5392                                                       .         CPL15............
                                                           .             V
                                                           .             V
5394                                                       .         L15L16
                                                           .             .
                                                           .             .
5401                                                       .             .        L16
                                                           .             .         .
                                                           .             .         .
5413                                                       .             .-------->   RL16
5410                                                       .             .     DL16RE
                                                           .             .         .
                                                           .             .         .
5416                                                       .             CPL16............
                                                           .                 V
                                                           .                 V
5418                                                       .             L16L17
                                                           .                 .
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5425                                                       .                 .        L17
                                                           .                 .         .
                                                           .                 .         .
5436                                                       .                 .-------->   RL17
5434                                                       .                 .     DL17RE
                                                           .                 .         .
                                                           .                 .         .
5439                                                       .             CPL17............
                                                           .                 .
                                                           .                 .
5443                                                       .                 .-------->   DL17S
5441                                                       .             DL17SE
                                                           .                 V
                                                           .                 V
5446                                                       .             L17L18
                                                           .                 .
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5453                                                       .                 .        L18
                                                           .                 .         .
                                                           .                 .         .
5465                                                       .                 .-------->   RL18
5462                                                       .                 .     DL18RE
                                                           .                 .         .
                                                           .                 .         .
5469                                                       .                 .         .<-------   DL11S
5468                                                       .                 .     DL11SE
                                                           .                 .         V
                                                           .                 .         V
5470                                                       .                 .     L11L18
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5478                                                                  .<-------  DL121S
5477                                                            DL121
                                                                    V
                                                                    V
5479                                                          L12L18
                                                                    .
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5486                                  CPL18.................................
                                            .
                                            .
5490                                        .-------> DL181S
5488                                  DL181
                                            .
                                            .
5495                                        .-------> DL182S
5493                                  DL182
                                          V
                                          V
5498                                 L18L19
                                            .
                                            .
5505                                        .        L19
                                            .          .
                                            .          .
5517                                        .          .------->    RL19
5514                                        .     DL19RE
                                            .          .
                                            .          .
5521                                        .          .          .<-------  DL122S
5520                                        .          .      DL122
                                            .          .          V
                                            .          .          V
5522                                        .          .     L12L19
                                            .          .          .
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5529                                CPL19.................................
                                          V
                                          V
5531                                L19DS7
                                          V
                                          V
5539                                DS7L27
                                            .
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5547                                        .        L23
                                            .          .
                                            .          .
5559                                        .------->    RL23
5556                                  DL23RE
                                          V
                                          V
5562                                 L23L24
                                            .
                                            .
5569                                        .        L24
                                            .          .
                                            .          .
5581                                        .          .------->    RL24
5578                                        .     DL24RE
                                            .          .
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5584                                  CPL24............
                                          V
                                          V
5586                                 L24L26
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                                            .
5593                                        .        L25
                                            .          .
                                            .          .
5606                                        .          .------->    RL25
5603                                        .     DL25RE
                                            .          V
                                            .          V
5609                                        .     L25L26
                                            .          .
                                            .          .
5617                                        .          .          .<-------  DL181S
5616                                        .          .      DL181
                                            .          .          V
                                            .          .          V
5618                                        .          .     L18L26
                                            .          .          .
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5626                                        .          .          .          .<-------  DL17S
5625                                        .          .          .     DL17SE
                                            .          .          .          V
                                            .          .          .          V
5627                                        .          .          .     L17L26
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5634                                        .          .          .          .        L26
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5646                                        .          .          .          .          .------->    RL26
5643                                        .          .          .          .     DL26RE
                                            .          .          .          .          .
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5649                                  CPL26.............................................
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                                            .
5653                                        .------->  DL26S
5651                                  DL26SE
                                          V
                                          V
5656                                 L26L27
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5663                                        .        L27
                                            .          .
                                            .          .
5676                                        .          .------->    RL27
5673                                        .     DL27RE
                                            .          .
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5680                                        .          .          .<-------  DL182S
5679                                        .          .      DL182
                                            .          .          V
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                                                                  V
5681                                                          L18L27
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5688                  CPL27.................................
                          V
                          V
5690                  L27L34
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                          .
5700                      .-------> DL34BR
5698                  DL34BN
                          .
                          .
5704                      .           .<-------  DL34BR
5703                      .      DL34BN
                          .           V
                          .           V
5705                      .      SRL34B
                          .           .
                          .           .
5714                  CPL34............
                          V
                          V
5716                  L34B34
                          .
                          .
5724                      .        L33
                          .           .
                          .           .
5736                      .           .-------> RL33
5733                      .      DL33RE
                          .           .
                          .           .
5741                      .           .-------> DL33S
5739                      .      DL33SE
                          .           V
                          .           V
5744                      .      L33L34
                          .           .
                          .           .
5751                      .           .        L34
                          .           .          .
                          .           .          .
5764                      .           .          .-------> RL34
5761                      .           .     DL34RE
                          .           .          .
                          .           .          .
5768                      .           .          .           .<-------  DL26S
5767                      .           .          .      DL26SE
                          .           .          .           V
                          .           .          .           V
5769                      .           .          .      L26L34
                          .           .          .           .
                          .           .          .           .
5776                  CPL34B................................
                          V
                          V
5778                  34DS11
                          V
                          V
5786                  DS1139
                          .
                          .
5794                      .        L39A
                          .           .
                          .           .
5804                  CPL39A............
                          .
                          .
5808                      .-------> DL39BR
5806                  DL39BN
                          .
                          .
5811                      .        L28
                          .           .
                          .           .
5823                      .           .-------> RL28
5820                      .      DL28RE
                          .           V
                          .           V
5826                      .      L28L29
                          .           .
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5833                      .           .        L29
                          .           .          .
                          .           .          .
5847                      .           .          .-------> RL29
5844                      .           .     DL29RE
                          .           .          .
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5850                      .       CPL29............
                          .           .
                          .           .
5854                      .           .-------> DL29S
5852                      .      DL29SE
                          .           V
                          .           V
5857                      .      L29L36
                          .           .
                          .           .
5864                      .           .        L35
                          .           .          .
                          .           .          .
5876                      .           .          .-------> RL35
5873                      .           .     DL35RE
                          .           .          .
                          .           .          .
5880                      .           .          .           .<-------  DL29S
5879                      .           .          .      DL29SE
                          .           .          .           V
                          .           .          .           V
5881                      .           .          .      L29L35
                          .           .          .           .
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5888                      .           .       CPL35............
                          .           .          V
                          .           .          V
5890                      .           .     L35L37
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5897                                                L37
                                                     .
5910                                                 .-------> RL37
5907                                            DL37RE
                                                     .
5913                                                 .       L36
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5925                                                 .         .-------> RL36
5923                                                 .     DL36RE
                                                     .         .
5928                                        CPL36...................................
                                                V
                                                V
5930                                        L36L38
                                                .
5938                                                L30
                                                    .
5949                                                .-------> RL30
5947                                            DL30RE
                                                    V
                                                    V
5952                                            L30L31
                                                    .
5959                                                L31
                                                    .
5970                                                .-------> RL31
5968                                            DL31RE
                                                    .
5973                                            CPL31............
                                                    V
                                                    V
5975                                            L31L32
                                                    .
5982                                                L32
                                                    .
5994                                                .-------> RL32
5991                                            DL32RE
                                                    .
5997                                            CPL32............
                                                    V
                                                    V
5999                                            L32L38
                                                    .
6006                                                L38
                                                    .
6018                                                .-------> RL38
6015                                            DL38RE
                                                    .
6022                                                .       .<------- DL33S
6021                                                .     DL33SE
                                                    .         V
                                                    .         V
6023                                                .     L33L38
                                                    .         .
6030                                        CPL38...................................
                                                V
                                                V
6032                                        L38L39
                                                .
6040                                                L39
                                                    .
6053                                                .-------> RL39
6050                                            DL39RE
                                                    .
6057                                                .       .<------- DL39BR
6056                                                .     DL39BN
                                                    .         .
6058                                        CPL39B......................
                                                V
                                                V
6060                                        SRL39B
                                                .
6069                                    CPL39............
                                            V
                                            V
6071                                    39DS13
                                            V
                                            V
6079                                    DS1344
                                            .
6087                                            L41
                                                .
6098                                            .-------> DL41S
6096                                        DL41SE
                                                V
                                                V
6101                                        L41L42
                                                .
6108                                                L42
                                                    .
6117                                        CPL42............
                                                .
6121                                            .-------> DL421S
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6119                    DL421
                          .
                          .-------> DL422S
6124                    DL422
                          V
                          V
6129                   L42L43
                          .
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6137                      .         L43
                          .           .
                          .           .------->    RL43
6146                      .      DL43RE
                          .           .
                          .           .
6152                    CPL43............
                          .
                          .
                          .-------> DL431S
6154                    DL431
                          .
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                          .-------> DL432S
6159                    DL432
                          V
                          V
6164                   L43L44
                          .
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6171                      .         L44
                          .           .
                          .           .------->    RL44
6181                      .      DL44RE
                          .           .
                          .           .
6187                CPL44........................
                        V
                        V
6189                44DS14
                        V
                        V
6197                DS1449
                          .
                          .
6205                      .         L40
                          .           .
                          .           .------->    RL40
6215                   DL40RE
                          V
                          V
6221                   L40L45
                          .
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6228                      .         L45
                          .           .
                          .           .------->    RL45
6238                      .      DL45RE
                          .           .
                          .           .
6244                    CPL45............
                          V
                          V
6246                   L45L46
                          .
                          .
6253                      .         L46
                          .           .
                          .           .<-------   DL41S
6262                      .      DL41SE
                          .           V
                          .           V
6264                      .      L41L46
                          .           .
                          .           .
6271                    CPL46........................
                          .
                          .
6275                      .-------> DL461S
6273                    DL461
                          .
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6280                      .-------> DL462S
6278                    DL462
                          V
                          V
6283                   L46L47
                          .
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6290                      .         L47
                          .           .
                          .           .------->    RL47
6299                      .      DL47RE
                          .           .
                          .           .<-------  DL421S
6305                      .       DL421
                          .           V
                          .           V
6307                      .      L42L47
                          .           .
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6314                    CPL47........................
                          .
                          .
6318                      .-------> DL471S
6316                    DL471
                          .
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6323                      .-------> DL472S
6321                    DL472
                          V
                          V
6326                   L47L48
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6333                                L48
                                     .
6345                                 .-------> RL48
6342                            DL48RE
                                     .
6349                                 .<------- DL422S
6348                                 .     DL422
                                     .        V
                                     .        V
6350                                 .    L42L48
                                     .
6358                                 .           .<------- DL431S
6357                                 .           .     DL431
                                     .           .        V
                                     .           .        V
6359                                 .           .    L43L48
                                     .           .
6366                        CPL48.....................................
                                     .
6370                                 .-------> DL481S
6368                        DL481
                                     .
6375                                 .-------> DL482S
6373                        DL482
                                 V
                                 V
6378                       L48L49
                                     .
6385                                L49
                                     .
6398                                 .-------> RL49
6395                            DL49RE
                                     .
6402                                 .<------- DL432S
6401                                 .     DL432
                                     .        V
                                     .        V
6403                                 .    L43L49
                                     .
6410                    CPL49.....................................
                                 V
                                 V
6412                    49DS15
                                 V
                                 V
6420                    DS1554
                                     .
6428                            L54
                                     .
6441                                 .-------> RL54
6438                        DL54RE
                                     .
6445                                 .<------- DL482S
6444                                 .     DL482
                                     .        V
                                     .        V
6446                                 .    L48L54
                                     .
6453                    CPL54........................
                                 V
                                 V
6455                    L54W2E
                                 V
                                 V
6463                    W2EB46
                                     .
6471                            B46
                                     .
6484                                 .-------> RB46
6481                        DB46RE
                                     .
6488                                 .<------- DB441S
6487                                 .     DB441
                                     .        V
                                     .        V
6489                                 .    B44B46
                                     .
6496                    CPB46........................
                                 V
                                 V
6498                    B46B47
                                     .
6505                            B47
                                     .
6517                                 .-------> RB47
6514                        DB47RE
                                     .
6521                                 .<------- DB442S
6520                                 .     DB442
                                     .        V
                                     .        V
6522                                 .    B44B47
                                     .
6529                    CPB47.....................................
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6531          .          .        B48
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              .          .         .
6543          .          .         .-------->   RB48
6540          .          .    DB48RE
              .          .         .
              .          .         .
6546          .     CPB48............
              .        V
              .        V
6548          .     SRB48
              .        V
              .        V
6557          .    B48B54
              .          .
              .          .
6565          .          .        B42
              .          .         .
              .          .         .
6577          .          .         .-------->   RB42
6574          .          .    DB42RE
              .          .         V
              .          .         V
6580          .          .    B42B53
              .          .         .
              .          .         .
6587          .          .         .        B53
              .          .         .         .
              .          .         .         .
6599          .          .         .         .-------->   RB53
6596          .          .         .    DB53RE
              .          .         .         .
              .          .         .         .
6602          .          .     CPB53............
              .          .         V
              .          .         V
6604          .          .    B53B54
              .          .         .
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6611          .          .         .        B49
              .          .         .         V
              .          .         .         V
6620          .          .         .    B49B50
              .          .         .         .
              .          .         .         .
6627          .          .         .         .        B50
              .          .         .         .         .
              .          .         .         .         .
6637          .          .         .         .         .          .<-------  LR02LR
6636          .          .         .         .         .     LR02SD
              .          .         .         .         .         V
              .          .         .         .         .         V
6638          .          .         .         .         .     B02B50
              .          .         .         .         .         .
              .          .         .         .         .         .
6646          .          .         .     CPB50......................
              .          .         .         V
              .          .         .         V
6648          .          .         .    B50B51
              .          .         .         .
              .          .         .         .
6655          .          .         .         .        B51
              .          .         .         .         .
              .          .         .         .         .
6664          .          .         .     CPB51............
              .          .         .         V
              .          .         .         V
6666          .          .         .    B51B52
              .          .         .         .
              .          .         .         .
6674          .          .         .         .        B52
              .          .         .         .         .
              .          .         .         .         .
6686          .          .         .         .         .-------->   RB52
6683          .          .         .         .    DB52RE
              .          .         .         .         .
              .          .         .         .         .
6689          .          .         .     CPB52............
              .          .         .         V
              .          .         .         V
6691          .          .         .    B52B54
              .          .         .         .
              .          .         .         .
6698          .          .         .         .        B54
              .          .         .         .         .
              .          .         .         .         .
6710          .          .         .         .         .-------->   RB54
6708          .          .         .         .    DB54RE
              .          .         .         .         .
              .          .         .         .         .
6713          .     CPB54...................................
              .        V
              .        V
6716          .    B54B57
              .          .
              .          .
6723          .          .        B55
              .          .         .
              .          .         .
6735          .          .         .-------->   RB55
6732          .          .    DB55RE
              .          .         V
              .          .         V
6738          .          .    B55B56
              .          .         .
              .          .         .
6745          .          .         .        B56
              .          .         .         .
              .          .         .         .
6756          .          .         .         .-------->   RB56
6754          .          .         .    DB56RE
              .          .         .         .
              .          .         .         .
6759          .          .     CPB56............
              .          .         V
              .          .         V
6761          .          .    B56B57
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6769          .          .         .        B57
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6780                                                  .------->   RB57
6778                                        DB57RE
                                                      .
6783                 CPB57.......................
                        V
                        V
6785                 B57B58
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6792                        B58
                            .
                            .
6804                        .------->   RB58
6801                     DB58RE
                            .
                            .
6807                 CPB58............
                        V
                        V
6809                 B58B59
                        .
6816                        B59
                            .
                            .
6829                        .------->   RB59
6825                     DB59RE
                            .
                            .
6832                 CPB59............
                        .
6834                        B64
                            .
                            .
6846                        .------->   RB64
6843                     DB64RE
                            V
                            V
6849                     B64B65
                            .
                            .
6859                        .------->   RB65
6856                     DB65RE
                            .
                            .
6862                        .        B65
                            .          .
                            .          .
6874                        .          .------->   DB65
6871                        .        DB65
                            .          .
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6877                 CPB65A......................
                        .
                        .
6883                    .------->   DB65E
6879                 DB65BN
                        V
                        V
6886                 B6565B
                        .
6893                        B61
                            .
                            .
6905                        .------->   RB61
6903                     DB61RE
                            V
                            V
6908                     B61B62
                            .
                            .
6916                        .        B62
                            .          .
                            .          .
6928                        .          .------->   RB62
6926                        .      DB62RE
                            .          .
                            .          .
6931                     CPB62............
                            V
                            V
6933                     B62B63
                            .
                            .
6940                        .        B63
                            .          .
                            .          .
6952                        .          .------->   RB63
6949                        .      DB63RE
                            .          .
                            .          .
6955                     CPB63............
                            V
                            V
6957                     SRB63
                            V
                            V
6965                     B63B65
                            .
                            .
6973                        .          .<-------   DB65
6972                        .        DB65
                            .          .
                            .          .
6974                 CPB65B......................
                        V
                        V
6976                 B65B66
                        .
6983                        S01
                            .
                            .
7003                        .------->   RS01
6995                     DS01RE
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7008            .          .          .-------> DS011S
7006            .          .      DS011
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7013            .          .          .-------> DS012S
7011            .          .      DS012
                .          .          V
                .          .          V
7016            .          .     S01B66
                .          .          .
                .          .          .
7023            .          .          .        B66
                .          .          .          .
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7038            .          .          .          .-------> RB66
7034            .          .          .     DB66RE
                .          .          .          .
                .          .          .          .
7041            .      CPB66.......................
                .          V
                .          V
7043            .     B66B68
                .          .
                .          .
7052            .          .          .<-------  DS011S
7051            .          .      DS011
                .          .          V
                .          .          V
7053            .          .     S01S02
                .          .          .
                .          .          .
7061            .          .          .        S02
                .          .          .          .
                .          .          .          .
7074            .          .          .          .-------> RS02
7072            .          .          .     DS02RE
                .          .          .          .
                .          .          .          .
7077            .          .      CPS02............
                .          .          .
                .          .          .
7081            .          .          .-------> DS021S
7079            .          .      DS021
                .          .          .
                .          .          .
7086            .          .          .-------> DS022S
7084            .          .      DS022
                .          .          V
                .          .          V
7089            .          .     S02B67
                .          .          .
                .          .          .
7097            .          .          .        B67
                .          .          .          .
                .          .          .          .
7109            .          .          .          .-------> RB67
7107            .          .          .     DB67RE
                .          .          .          .
                .          .          .          .
7113            .          .          .          .          .<-------  DS012S
7112            .          .          .          .      DS012
                .          .          .          .          V
                .          .          .          .          V
7114            .          .          .          .     S01B67
                .          .          .          .          .
                .          .          .          .          .
7121            .          .      CPB67........................
                .          .          V
                .          .          V
7123            .          .     B67B68
                .          .          .
                .          .          .
7130            .          .          .        B68
                .          .          .          .
                .          .          .          .
7142            .          .          .          .-------> RB68
7140            .          .          .     DB68RE
                .          .          .          .
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7145            .      CPB68.......................
                .          V
                .          V
7147            .     B68B69
                .          .
                .          .
7155            .          .        B69
                .          .          .
                .          .          .
7167            .          .          .-------> RB69
7164            .          .     DB69RE
                .          .          .
                .          .          .
7171            .          .          .          .<-------  DS022S
7170            .          .          .      DS022
                .          .          .          V
                .          .          .          V
7172            .          .          .     S02B69
                .          .          .          .
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7179            .      CPB69.......................
                .          V
                .          V
7181            .     B69B70
                .          .
                .          .
7188            .          .        B85
                .          .          .
                .          .          .
7202            .          .          .-------> RB85
7197            .          .     DB85RE
                .          .          V
                .          .          V
7205            .          .     B85B86
                .          .          .
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7212            .          .          .        B86
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7223                                  .-------> RB86
7221                             DB86RE
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7226                        CPB86............
                                 V
                                 V
7228                        B86B89
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                                 .
7235                                 B87
                                      .
                                      .
7246                                  .-------> RB87
7244                             DB87RE
                                      V
                                      V
7249                             B87B88
                                      .
                                      .
7256                                      B88
                                          .
                                          .
7267                                      .-------> RB88
7265                                 DB88RE
                                          .
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7270                                CPB88............
                                      V
                                      V
7272                             B88B89
                                      .
                                      .
7279                                      B89
                                          .
                                          .
7291                                      .-------> RB89
7289                                 DB89RE
                                          .
                                          .
7294                        CPB89........................
                                 V
                                 V
7296                        SRB89
                                 .
                                 .
7306                             .-------> DB89SD
7304                        DB89SW
                                 V
                                 V
7309                        B89B92
                                 .
                                 .
7316                                 B90
                                      .
                                      .
7327                                  .-------> RB90
7325                             DB90RE
                                      V
                                      V
7330                             B90B91
                                      .
                                      .
7339                                      B91
                                          .
                                          .
7352                                      .-------> RB91
7349                                 DB91RE
                                          .
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7355                                CPB91............
                                      V
                                      V
7357                             B91B92
                                      .
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7364                                      B92
                                          .
                                          .
7377                                      .-------> RB92
7374                                 DB92RE
                                          .
                                          .
7380                        CPB92........................
                                 V
                                 V
7382                        B92B70
                                 .
                                 .
7389                                 B70
                                      .
                                      .
7401                                  .-------> RB70
7398                             DB70RE
                                      .
                                      .
7404                   CPB70........................
                            V
                            V
7406                   B70B93
                            .
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7414                        B93
                            .
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7425                        .-------> RB93
7423                   DB93RE
                            .
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7428                   CPB93............
                            V
                            V
7430                   B93B94
                            .
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7438                        B94
                            .
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7451                        .-------> RB94
7448                   DB94RE
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7454            .      CPB94...........
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7456        DUMMY...........
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7458            .       B101
                .          V
                .          V
7468            .     SRB101
                .          V
                .          V
7476            .      B101S
                .          .
                .          .
7483            .          .        S06
                .          .          .
                .          .          .
7502            .          .          .-------->    RS06
7495            .          .     DS06RE
                .          .          .
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7505            .      CPS06...........
                .          V
                .          V
7507            .     S06S07
                .          .
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7515            .          .        S07
                .          .          .
                .          .          .
7527            .          .          .-------->    RS07
7525            .          .     DS07RE
                .          .          .
                .          .          .
7530            .      CPS07...........
                .          V
                .          V
7532            .     S07S08
                .          .
                .          .
7540            .          .        S08
                .          .          .
                .          .          .
7555            .          .          .-------->    RS08
7552            .          .     DS08RE
                .          .          .
                .          .          .
7558            .      CPS08...........
                .          V
                .          V
7560            .     S08S09
                .          .
                .          .
7567            .          .        S09
                .          .          .
                .          .          .
7583            .          .          .-------->    RS09
7577            .          .     DS09RE
                .          .          .
                .          .          .
7586            .      CPS09...........
                .          V
                .          V
7588            .      SRS09
                .          .
                .          .
7598            .          .-------->  DS091W
7596            .      DS091
                .          .
                .          .
7603            .          .-------->  DS092W
7601            .      DS092
                .          V
                .          V
7606            .     S09S23
                .          .
                .          .
7613            .          .        S21
                .          .          .
                .          .          .
7625            .          .          .-------->    RS21
7622            .          .     DS21RE
                .          .          .
                .          .          .
7630            .          .          .-------->   DS21S
7628            .          .     DS21SE
                .          .          V
                .          .          V
7633            .          .     S21S23
                .          .          .
                .          .          .
7640            .          .          .        S22
                .          .          .          .
                .          .          .          .
7652            .          .          .          .-------->    RS22
7650            .          .          .     DS22RE
                .          .          .          V
                .          .          .          V
7655            .          .          .     S22S23
                .          .          .          .
                .          .          .          .
7662            .          .          .          .        S23
                .          .          .          .          .
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7675            .          .          .          .          .-------->    RS23
7673            .          .          .          .     DS23RE
                .          .          .          .          .
                .          .          .          .          .
7678            .      CPS23...................................
                .          V
                .          V
7680            .      SRS23
                .          V
                .          V
7688            .     S23S24
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7695                S24
                     .
7708                 .-------> RS24
7705            DS24RE
                     .
7711                 S03
                     .
7730                 .-------> RS03
7724            DS03RE
                     .
7734                 .<------- DS021S
7733                 DS021
                     V
                     V
7735                 S02S03
                     .
                     .
7742            CPS03............
                     V
                     V
7744            S03S04
                     .
7752                 S04
                     .
                     .
7767                 .-------> RS04
7763                 DS04RE
                     .
                     .
7770            CPS04............
                     V
                     V
7772            SRS04
                     V
                     V
7780            S04S10
                     .
7788                 .<------- DS091W
7787                 DS091
                     V
                     V
7789                 S09S10
                     .
                     .
7796                 .        S05
                     .         .
                     .         .
7809                 .         .-------> RS045
7806                 .      DS05RE
                     .         V
                     .         V
7812                 .      S05S10
                     .         .
                     .         .
7819                 .         .        S10
                     .         .         .
                     .         .         .
7832                 .         .         .-------> RS10
7829                 .         .      DS10RE
                     .         .         .
                     .         .         .
7835            CPS10...................................
                     V
                     V
7837            S10S24
                     .
                     .
7845                 .<------- DS092W
7844                 DS092
                     V
                     V
7846                 S09S24
                     .
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7855       CPS24.....................................
                V
                V
7857       S24S25
                .
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7864            W21
                 .
                 .
7877             .-------> DW21
7874        DW21RE
                 V
                 V
7880        W21L50
                 .
                 .
7887             .     L50
                 .      .
                 .      .
7900             .      .-------> RL50
7897             .   DL50RE
                 .      .
                 .      .
7903         CPL50............
                 V
                 V
7905        L50L51
                 .
                 .
7912             .     L51
                 .      .
                 .      .
7923             .      .-------> RL51
7921             .   DL51RE
                 .      .
                 .      .
7927             .      .<------- DL461S
7926             .   DL461
                 .      V
                 .      V
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7928                                    L46L51
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7935                  CPL51.......................
                        V
                        V
7937                L51L52
                        .
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7944                        L52
                          .
                          .
7955                      .-------->    RL52
7953                DL52RE
                          .
                          .
7959                      .           .<-------  DL462S
7958                      .       DL462
                          .           V
                          .           V
7960                      .       L46L52
                          .           .
                          .           .
7968                      .           .           .<-------  DL471S
7967                      .           .       DL471
                          .           .           V
                          .           .           V
7969                      .           .      L47L52
                          .           .           .
                          .           .           .
7976                  CPL52...................................
                        .
                        .
7980                    .-------->  DL521S
7978                  DL521
                        .
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7985                    .-------->  DL522S
7983                  DL522
                        V
                        V
7988                L52L53
                        .
                        .
7995                        L53
                          .
                          .
8007                      .-------->    RL53
8004                DL53RE
                          .
                          .
8011                      .           .<-------  DL472S
8010                      .       DL472
                          .           V
                          .           V
8012                      .       L47L53
                          .           .
                          .           .
8020                      .           .           .<-------  DL481S
8019                      .           .       DL481
                          .           .           V
                          .           .           V
8021                      .           .      L48L53
                          .           .           .
                          .           .           .
8028                  CPL53...................................
                        .
                        .
8032                    .-------->  DL531S
8030                  DL531
                        .
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8037                    .-------->  DL532S
8035                  DL532
                        V
                        V
8040                L53L54
                        V
                        V
8047                  SRL54
                        V
                        V
8057                L54L58
                        .
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8065                        L55
                          .
                          .
8076                      .-------->    RL55
8074                DL55RE
                          .
                          .
8081                      .-------->  DL551S
8079                 DL551
                          .
                          .
8086                      .-------->  DL552S
8084                 DL552
                          V
                          V
8089                L55L56
                          .
                          .
8097                          L56
                            .
                            .
8108                        .-------->    RL56
8106                      DL56RE
                            .
                            .
8112                        .           .<-------  DL521S
8111                        .       DL521
                            .           V
                            .           V
8113                        .      L52L56
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8120                     CPL56.......................
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8124                    .-------> DL561S
8122                DL561
                        .
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8129                    .-------> DL562S
8127                DL562
                        V
                        V
8132               L56L57
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                        .
8139                    .        L57
                        .          .
                        .          .
8151                    .          .-------> RL57
8148                    .      DL57RE
                        .          .
                        .          .
8155                    .          .         .<------- DL522S
8154                    .          .      DL522
                        .          .         V
                        .          .         V
8156                    .          .     L52L57
                        .          .          .
                        .          .          .
8164                    .          .          .          .<------- DL531S
8163                    .          .          .      DL531
                        .          .          .         V
                        .          .          .         V
8165                    .          .          .     L53L57
                        .          .          .          .
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8172                    .      CPL57..................................
                        .
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8176                    .-------> DL571S
8174                    .      DL571
                        .
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8181                    .-------> DL572S
8179                    .      DL572
                        .         V
                        .         V
8184                    .     L57L58
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8191                    .        L58
                        .          .
                        .          .
8203                    .          .-------> RL58
8200                    .      DL58RE
                        .          .
                        .          .
8207                    .          .         .<------- DL532S
8206                    .          .      DL532
                        .          .         V
                        .          .         V
8208                    .          .     L53L58
                        .          .          .
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8215                    .  CPL58..................................
                        .     V
                        .     V
8217                    .  L58L63
                        .
                        .
8225                    .        L63
                        .          .
                        .          .
8237                    .          .-------> RL63
8234                    .      DL63RE
                        .          .
                        .          .
8241                    .          .         .<------- DL572S
8240                    .          .      DL572
                        .          .         V
                        .          .         V
8242                    .          .     L57L63
                        .          .          .
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8249                    .  CPL63.........................
                        .     V
                        .     V
8251                    .  L63L64
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8259                    .        L64
                        .          .
                        .          .
8271                    .          .-------> RL64
8268                    .      DL64RE
                        .          .
                        .          .
8274                    .  CPL64............
                        .     V
                        .     V
8276                    .  L64L67
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                        .
8284                    .        L67
                        .          .
                        .          .
8296                    .          .-------> RL67
8293                    .      DL67RE
                        .          .
                        .          .
8299                    .  CPL67............
                        .     V
                        .     V
8301                    .  L67L68
                        .
                        .
8309                    .        L60
                        .          .
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8321                    .          .-------> RL60
8318                    .      DL60RE
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8325                    .          .         .<------- DL552S
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8324                                  DL552
                                          V
                                          V
8326                                  L55L60
                                          .
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8334                                      .<-------  DL561S
8333                                      .      DL561
                                          .          V
                                          .          V
8335                                      .      L56L60
                                          .          .
                                          .          .
8342                              CPL60.......................
                                          .
                                          .
8346                                      .-------> DL601S
8344                              DL601
                                          .
                                          .
8351                                      .-------> DL602S
8349                              DL602
                                      V
                                      V
8354                              L60L61
                                          .
                                          .
8361                                      .         L61
                                          .          .
                                          .          .
8373                                      .          .------->    RL61
8370                                      .      DL61RE
                                          .          .
                                          .          .
8377                                      .          .<-------  DL562S
8376                                      .          .      DL562
                                          .          .          V
                                          .          .          V
8378                                      .          .      L56L61
                                          .          .          .
                                          .          .          .
8387                              CPL61.......................
                                          .
                                          .
8391                                      .------->   DL61S
8389                              DL61SE
                                      V
                                      V
8394                              L61L62
                                          .
                                          .
8401                                      .         L62
                                          .          .
                                          .          .
8413                                      .          .------->    RL62
8410                                      .      DL62RE
                                          .          .
                                          .          .
8417                                      .          .<-------  DL571S
8416                                      .          .      DL571
                                          .          .          V
                                          .          .          V
8418                                      .          .      L57L62
                                          .          .          .
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8426                              CPL62.......................
                                      V
                                      V
8428                              L62L68
                                          .
                                          .
8437                                      .          .<-------  DL602S
8436                                      .      DL602
                                          .          V
                                          .          V
8438                                      .      L60L68
                                          .          .
                                          .          .
8446                                      .          .<-------   DL61S
8445                                      .          .      DL61SE
                                          .          .          V
                                          .          .          V
8447                                      .          .      L61L68
                                          .          .          .
                                          .          .          .
8454                                      .          .          .         L68
                                          .          .          .          .
                                          .          .          .          .
8467                                      .          .          .          .-------> RL68
8464                                      .          .          .     DL68RE
                                          .          .          .          .
                                          .          .          .          .
8470                          CPL68.......................................,.........
                                          .
                                          .
8472                                  W28
                                          .
                                          .
8485                                      .------->    RW28
8481                              DW28RE
                                      V
                                      V
8488                              W28W29
                                          .
                                          .
8496                                      .         W29
                                          .          .
                                          .          .
8509                                      .          .------->    RW29
8505                                      .      DW29RE
                                          .          .
                                          .          .
8512                              CPW29............
                                      V
                                      V
8514                              W29W30
                                          .
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8521                                      .         W30
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8533                                  .------->    RW30
8530                            DW30RE
                                      .
8536                      CPW30............
                              V
                              V
8538                      W30L59
                                      .
8545                                L59
                                      .
                                      .
8556                                  .------->    RL59
8554                            DL59RE
                                      .
                                      .
8560                                  .           .<-------  DL551S
8559                                  .       DL551
                                      .           V
                                      .           V
8561                                  .      L55L59
                                      .           .
                                      .           .
8569                      CPL59........................
                              V
                              V
8571                      L59L65
                                      .
8578                                W31
                                      .
                                      .
8590                                  .------->    RW31
8587                            DW31RE
                                      V
                                      V
8593                            W31W32
                                      .
                                      .
8601                                  .         W32
                                      .           .
                                      .           .
8613                                  .           .------->    RW32
8610                                  .      DW32RE
                                      .           .
                                      .           .
8616                            CPW32............
                                      V
                                      V
8618                            W32L65
                                      .
                                      .
8626                                  .         L65
                                      .           .
                                      .           .
8638                                  .           .------->    RL65
8635                                  .      DL65RE
                                      .           .
                                      .           .
8641                      CPL65........................
                              V
                              V
8643                      L65L69
                                      .
8651                                L69
                                      .
                                      .
8661                      CPL69............
                              V
                              V
8663                      L69L70
                                      .
8671                                L70
                                      .
                                      .
8680                      CPL70............
                              V
                              V
8682                      L70L71
                                      .
8690                                L66
                                      .
                                      .
8702                                  .------->    RL66
8699                            DL66RE
                                      .
                                      .
8706                                  .           .<-------  DL601S
8705                                  .       DL601
                                      .           V
                                      .           V
8707                                  .      L60L66
                                      .           .
                                      .           .
8714                            CPL66............
                                      V
                                      V
8716                            L66L71
                                      .
                                      .
8723                                  .         L71
                                      .           .
                                      .           .
8734                                  .           .------->    RL71
8732                                  .      DL71RE
                                      .           .
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8737                      CPL71........................
                              V
                              V
8739                      L71L72
                                      .
8747                                L72
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8759                                                  .------->   RL72
8757                                        DL72RE
                                                        .
                                                        .
8762                  CPL72.......................
                          V
                          V
8764                  SRL72
                          V
                          V
8773                L72RID
                          V
                          V
8781                RIDS13
                          .
                          .
8788                                  S12
                                        .
                                        .
8800                                    .------->   RS12
8797                            DS12RE
                                      V
                                      V
8803                             SRS12
                                      V
                                      V
8811                            S12S13
                                        .
                                        .
8818                                            S13
                                                  .
                                                  .
8830                                              .------->   RS13
8828                                        DS13RE
                                                  .
                                                  .
8833                  CPS13.......................
                          .
                          .
8837                      .------->   DS13S
8835                DS13SE
                          V
                          V
8840                S13S19
                          .
                          .
8849                                  S19
                                        .
                                        .
8865                                    .------->   RS19
8860                            DS19RE
                                        .
                                        .
8868                  CPS19............
                          V
                          V
8870                S19S20
                          .
                          .
8879                                  B95
                                        .
                                        .
8891                                    .------->   RB95
8888                            DB95RE
                                      V
                                      V
8894                            B95B96
                                        .
                                        .
8901                                            B96
                                                  .
                                                  .
8913                                              .------->   RB96
8911                                        DB96RE
                                                  .
                                                  .
8916                             CPB96............
                                      V
                                      V
8918                            B96B97
                                        .
                                        .
8925                                            B97
                                                  .
                                                  .
8935                             CPB97............
                                        .
                                        .
8939                                    .------->   RB97
8937                            DB97RE
                                      V
                                      V
8942                             SRB97
                                        .
                                        .
8952                                    .------->   DD97S
8950                            DB97SE
                                      V
                                      V
8955                            B97B99
                                        .
                                        .
8962                                            B99
                                                  .
                                                  .
8974                                              .------->   RB99
8971                                        DB99RE
                                                  .
                                                  .
8977                             CPB99............
                                      V
                                      V
8979                            B99S11
                                        .
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8987                                            S11
                                                  .
                                                  .
8999                                              .------->   RS11
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8996                                  DS11RE
                                        .
9002                            CPS11.........
                                    V
                                    V
9004                            SRS11
                                    V
                                    V
9012                           S11S14
                                        .
9019                                 S14
                                        .
9035                                    .------->    RS14
9031                                  DS14RE
                                        .
9038                           CPS14A.........
                                        .
9041                                    .<-------   DS13S
9040                                  DS13SE
                                        V
                                        V
9042                                  S13S14
                                        .
9049                           CPS14B.........
                                    V
                                    V
9051                           S14S16
                                        .
9058                                 B98
                                        .
9070                                    .------->    RB98
9068                                  DB98RE
                                        V
                                        V
9073                                  B98100
                                        .
9080                                        .       B100
                                            .         .
9090                                        .         .<-------   DD97S
9089                                        .     DB97SE
                                            .         .
9091                                  CPB100........................
                                        V
                                        V
9093                                   B100S
                                        .
9100                                        .         S15
                                            .         .
9116                                        .         .------->    RS15
9112                                        .     DS15RE
                                            .         .
9119                                   CPS15.........
                                        V
                                        V
9121                                  S15S16
                                        .
9128                                        .         S16
                                            .         .
9142                                        .         .------->    RS16
9138                                        .     DS16RE
                                            .         .
9145                            CPS16........................
                                    V
                                    V
9147                           S16S18
                                        .
9154                                 S17
                                        .
9167                                    .------->    RS17
9164                                   DS17RE
                                        V
                                        V
9170                                   S17S18
                                        .
9177                                        .         S18
                                            .         .
9198                                        .         .------->    RS18
9191                                        .     DS18RE
                                            .         .
9201                            CPS18........................
                                        .
9203                                 S20
                                        .
9216                                    .------->    RS20
9213                                  DS20RE
                                        .
9219                        CPS20........................
                                V
                                V
9221                        S20S26
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9230                            S26
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9241                                  .-------->   RS26
9239                            DS26RE
                                      .
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9244                      CPS26............
                                V
                                V
9246                      S26S31
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                                .
9255                            S26A
                                .
                                .
9267                                  .-------->   RS26A
9265                            DS26AR
                                      .
                                      .
9271                                      .<-------   DS21S
9270                                  DS21SE
                                          V
                                          V
9272                                  S2126A
                                      .       .
                                      .       .
9279                            CPS26A............
                                      .
                                      .
9283                                  .-------->   DS26S
9281                            DS26SE
                                     V
                                     V
9286                            26A31A
                                      .
                                      .
9294                                      S28
                                          .
                                          .
9307                                      .-------->   RS28
9305                                  DS28RE
                                          V
                                          V
9310                                  S28S29
                                          .
                                          .
9317                                      .       S29
                                          .         .
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9329                                      .         .-------->   RS29
9326                                      .     DS29RE
                                          .         .
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9332                                   CPS29............
                                          V
                                          V
9334                                  S29S30
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9342                                      .       S30
                                          .         .
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9354                                      .         .-------->   RS30
9351                                      .     DS30RE
                                          .         .
                                          .         .
9357                                   CPS30............
                                          V
                                          V
9359                                  S30S32
                                          .
                                          .
9366                                      .       S32
                                          .         .
                                          .         .
9379                                      .         .-------->   RS32
9376                                      .     DS32RE
                                          .         .
                                          .         .
9382                                   CPS32............
                                          .
                                          .
9384                                      .      S31A
                                          .         .
                                          .         .
9397                                      .         .-------->   RS31A
9394                                      .     DS31AR
                                          .         .
                                          .         .
9400                                      .         .       S31
                                          .         .         .
                                          .         .         .
9412                                      .         .         .-------->   RS31
9409                                      .         .     DS31RE
                                          .         .         .
                                          .         .         .
9415                      CPS31.............................................
                                V
                                V
9417                      SRS31
                                V
                                V
9427                      S31S27
                                .
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9435                            S27
                                .
                                .
9448                                  .-------->   RS27
9445                            DS27RE
                                      .
                                      .
9452                                      .<-------   DS26S
9451                                  DS26SE
                                          V
                                          V
9453                                  S26A27
                                      .       .
                                      .       .
9461                      CPS27........................
                                V
                                V
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9463                S27S82
                      .
9470                  .        S82
                      .         .
9483                  .         .-------->    RS82
9480                  .     DS82RE
                      .         .
9486                CPS82............
                      V
                      V
9488                S8281A
                      .
9495                  .       S81A
                      .         .
9508                  .         .-------->   RS81A
9505                  .     DS81AR
                      .         .
9511                CPS81A...........
                      V
                      V
9513                S81A25
                      .
9520                  .        S25
                      .         .
9532                  .         .-------->    RS25
9529                  .     DS25RE
                      .         .
9535            CPS25........................
                      .
9537                S81
                      .
9549                  .-------->    RS81
9546                DS81RE
                      .
9552                  .       S82A
                      .         .
9565                  .         .-------->   RS82A
9562                  .     DS82AR
                      .         V
                      .         V
9568                  .     S82A83
                      .         .
9575                  .         .        S83
                      .         .         .
9588                  .         .         .-------->    RS83
9585                  .         .     DS83RE
                      .         .         .
9591                  .       CPS83............
                      .         .
9593                  .         .        S84
                      .         .         .
9605                  .         .         .-------->    RS84
9602                  .         .     DS84RE
                      .         .         .
9608        DUMMY...............................................
                      .
9610            S35
                      .
9622                  .-------->    RS35
9619            DS35RE
                      V
                      V
9625            S35S44
                      .
9631                S34
                      .
9643                  .-------->    RS34
9640                DS34RE
                      .
9648                  .-------->   DS34S
9646                DS34SE
                      V
                      V
9651                S34S44
                      .
9658                  .        S44
                      .         .
9670                  .         .-------->    RS44
9667                  .     DS44RE
                      .         .
9673            CPS44........................
                      V
                      V
9675            SRS44
                      V
                      V
9683            S44S45
                      .
9692                  .<--------   DS34S
9691                DS34SE
                      V
                      V
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9693                .           .      S34S45
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9701                .           .          .         S45
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9712                .           .          .           .-------->    RS45
9710                .           .          .      DS45RE
                    .           .          .           .
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9715                .       CPS45.......................
                    .           V
                    .           V
9717                .      S45S46
                    .           .
                    .           .
9725                .           .         S46
                    .           .          .
                    .           .          .
9737                .           .          .-------->    RS46
9734                .           .      DS46RE
                    .           .          .
                    .           .          .
9740                .       CPS46............
                    .           V
                    .           V
9742                .       SRS46
                    .           V
                    .           V
9750                .      S46S47
                    .           .
                    .           .
9757                .           .         S47
                    .           .          .
                    .           .          .
9769                .           .          .-------->    RS47
9766                .           .      DS47RE
                    .           .          .
                    .           .          .
9772                .       CPS47............
                    .           V
                    .           V
9774                .      S47S48
                    .           .
                    .           .
9782                .           .         S48
                    .           .          .
                    .           .          .
9794                .           .          .-------->    RS48
9791                .           .      DS48RE
                    .           .          .
                    .           .          .
9797                .       CPS48............
                    .           .
                    .           .
9801                .           .-------->   DS48S
9799                .       DS48S
                    .           V
                    .           V
9804                .      S48S50
                    .           .
                    .           .
9813                .           .         S49
                    .           .          .
                    .           .          .
9825                .           .          .-------->    RS49
9822                .           .      DS49RE
                    .           .          V
                    .           .          V
9828                .           .      S49S50
                    .           .          .
                    .           .          .
9835                .           .          .         S50
                    .           .          .           .
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9847                .           .          .           .-------->    RS50
9844                .           .          .      DS50RE
                    .           .          .           .
                    .           .          .           .
9850                .       CPS50.......................
                    .           V
                    .           V
9852                .       SRS50
                    .           V
                    .           V
9860                .      S50S51
                    .           .
                    .           .
9868                .           .         S36
                    .           .          .
                    .           .          .
9880                .           .          .-------->    RS36
9878                .           .      DS36RE
                    .           .          V
                    .           .          V
9883                .           .      SRS36
                    .           .          V
                    .           .          V
9891                .           .      S36S37
                    .           .          .
                    .           .          .
9898                .           .          .         S37
                    .           .          .           .
                    .           .          .           .
9910                .           .          .           .-------->    RS37
9907                .           .          .      DS37RE
                    .           .          .           .
                    .           .          .           .
9913                .           .      CPS37............
                    .           .          V
                    .           .          V
9915                .           .      S37S38
                    .           .          .
                    .           .          .
9922                .           .          .         S38
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                    .           .          .           .
9934                .           .          .           .-------->    RS38
9931                .           .          .      DS38RE
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9937        CPS38............
                V
                V
9939        S38S39
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9946                S39
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                    .
9958                .-------->    RS39
9955            DS39RE
                    .
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9961        CPS39............
                V
                V
9963        S39S43
                .
                .
9970                S40
                    .
                    .
9982                .-------->    RS40
9979            DS40RE
                    V
                    V
9985            S40S41
                    .
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9992                .       S41
                    .         .
                    .         .
10005               .         .-------->    RS41
10002               .     DS41RE
                    .         .
                    .         .
10008           CPS41............
                    V
                    V
10010           S41S42
                    .
                    .
10017               .       S42
                    .         .
                    .         .
10029               .         .-------->    RS42
10026               .     DS42RE
                    .         .
                    .         .
10032           CPS42............
                    V
                    V
10034           S42S43
                    .
                    .
10041               .       S43
                    .         .
                    .         .
10053               .         .-------->    RS43
10050               .     DS43RE
                    .         .
                    .         .
10056       CPS43........................
                V
                V
10058       SRS43
                V
                V
10066       S43S51
                .
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10073               .       S33
                    .         .
                    .         .
10086               .         .-------->    RS33
10083           DS33RE
                    V
                    V
10089           S33S51
                    .
                    .
10096               .       S51
                    .         .
                    .         .
10108               .         .-------->    RS51
10105               .     DS51RE
                    .         .
                    .         .
10111   CPS51....................................
            V
            V
10113   SRS51
            V
            V
10121   S51S54
            .
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10128           S52
                .
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10141           .-------->    RS52
10138       DS52RE
                V
                V
10144       S52S54
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10152               S54
                    .
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10164               .-------->    RS54
10161           DS54RE
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10167   CPS54........................
            V
            V
10169   S54S55
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10176          .          .         S53
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               .          .          .
10188          .          .          .------->    RS53
10185          .          .     DS53RE
               .          .          V
               .          .          V
10191          .          .     S53S55
               .          .          .
               .          .          .
10198          .          .          .        S55
               .          .          .          .
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10210          .          .          .          .------->    RS55
10207          .          .          .     DS55RE
               .          .          .          .
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10213          .     CPS55.......................
               .         V
               .         V
10215          .     S55S74
               .          .
               .          .
10222          .          .         S56
               .          .          .
               .          .          .
10234          .          .          .------->    RS56
10231          .          .     DS56RE
               .          .          V
               .          .          V
10237          .          .     S56S57
               .          .          .
               .          .          .
10244          .          .          .        S57
               .          .          .          .
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10256          .          .          .          .------->    RS57
10253          .          .          .     DS57RE
               .          .          .          .
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10259          .          .      CPS57............
               .          .          V
               .          .          V
10261          .          .     S57S58
               .          .          .
               .          .          .
10269          .          .          .          .<-------   DS48S
10268          .          .          .      DS48S
               .          .          .          V
               .          .          .          V
10270          .          .          .     S48S58
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10277          .          .          .          .         S58
               .          .          .          .          .
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10289          .          .          .          .          .------->    RS58
10286          .          .          .          .     DS58RE
               .          .          .          .          .
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10292          .          .      CPS58........................
               .          .          V
               .          .          V
10294          .          .      SRS58
               .          .          V
               .          .          V
10302          .          .     S58S59
               .          .          .
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10309          .          .          .        S59
               .          .          .          .
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10322          .          .          .          .------->    RS59
10319          .          .          .     DS59RE
               .          .          .          .
               .          .          .          .
10325          .          .      CPS59............
               .          .          V
               .          .          V
10327          .          .      SRS59
               .          .          V
               .          .          V
10335          .          .     S59S74
               .          .          .
               .          .          .
10342          .          .          .        S72
               .          .          .          .
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10354          .          .          .          .------->    RS72
10351          .          .          .     DS72RE
               .          .          .          V
               .          .          .          V
10357          .          .          .     S72S73
               .          .          .          .
               .          .          .          .
10364          .          .          .          .         S73
               .          .          .          .          .
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10376          .          .          .          .          .------->    RS73
10373          .          .          .          .     DS73RE
               .          .          .          .          .
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10379          .          .          .      CPS73............
               .          .          .          V
               .          .          .          V
10381          .          .          .     S73S74
               .          .          .          .
               .          .          .          .
10388          .          .          .          .         S74
               .          .          .          .          .
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10400          .          .          .          .          .------->    RS74
10397          .          .          .          .     DS74RE
               .          .          .          .          .
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10403          .     CPS74.................................
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10407          .          .-------> DS741W
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10405          .      DS741
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10412          .        .-------> DS742W
10410          .      DS742
               .        V
               .        V
10415          .     S74S79
               .        .
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10422          .        .        S79
               .        .         .
               .        .         .
10434          .        .         .------->    RS79
10431          .        .     DS79RE
               .        .         .
               .        .         .
10437          .      CPS79.............
               .        V
               .        V
10439          .     S79S80
               .        .
               .        .
10446          .        .        S92
               .        .         .
               .        .         .
10458          .        .         .------->    RS92
10455          .        .     DS92RE
               .        .         .
               .        .         .
10462          .        .         .        .<-------  DS741W
10461          .        .         .      DS741
               .        .         .        V
               .        .         .        V
10463          .        .         .     S74S92
               .        .         .        .
               .        .         .        .
10470          .        .      CPS92............
               .        .         V
               .        .         V
10472          .        .     S92S80
               .        .         .
               .        .         .
10480          .        .         .        .<-------  DS742W
10479          .        .         .      DS742
               .        .         .        V
               .        .         .        V
10481          .        .         .     S74S80
               .        .         .        .
               .        .         .        .
10488          .        .         .        .        S80
               .        .         .        .         .
               .        .         .        .         .
10501          .        .         .        .         .------->    RS80
10498          .        .         .        .     DS80RE
               .        .         .        .         .
               .        .         .        .         .
10504          .      CPS80.................................
               .        .
               .        .
10506          .        .        S90
               .        .         .
               .        .         .
10518          .        .         .------->    RS90
10515          .        .     DS90RE
               .        .         V
               .        .         V
10521          .        .     S90S91
               .        .         .
               .        .         .
10528          .        .         .        S91
               .        .         .         .
               .        .         .         .
10541          .        .         .         .------->    RS91
10538          .        .         .     DS91RE
               .        .         .         .
               .        .         .         .
10544          .        .      CPS91............
               .        .         .
               .        .         .
10546          .        .         .        S89
               .        .         .         .
               .        .         .         .
10559          .        .         .         .------->    RS89
10556          .        .         .     DS89RE
               .        .         .         .
               .        .         .         .
10562          .        .         .         .        S88
               .        .         .         .         .
               .        .         .         .         .
10574          .        .         .         .         .------->    RS88
10571          .        .         .         .     DS88RE
               .        .         .         .         .
               .        .         .         .         .
10577          .        .         .         .         .        S87
               .        .         .         .         .         .
               .        .         .         .         .         .
10589          .        .         .         .         .         .------->    RS87
10586          .        .         .         .         .     DS87RE
               .        .         .         .         .         .
               .        .         .         .         .         .
10592          .        .         .         .         .         .        S86
               .        .         .         .         .         .         .
               .        .         .         .         .         .         .
10604          .        .         .         .         .         .         .------->    RS86
10601          .        .         .         .         .         .     DS86RE
               .        .         .         .         .         .         .
               .        .         .         .         .         .         .
10607          .        .         .         .         .         .         .        S85
               .        .         .         .         .         .         .         .
               .        .         .         .         .         .         .         .
10619          .        .         .         .         .         .         .         .------->    RS85
10616          .        .         .         .         .         .         .     DS85RE
               .        .         .         .         .         .         .         .
               .        .         .         .         .         .         .         .
10622          .        .         .         .       DUMMY.....................................
               .        .         .         .         .
               .        .         .         .         .
10624        DUMMY...............................................
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10626          W59
10639          .------->    RW59
10636     DW59RE
               V
               V
10642     W59W60
10650          W61
10661          .------->    RW61
10658     DW61RE
10666          .------->   DW61S
10664     DW61SE
10669          W60
10682          .------->    RW60
10679     DW60RE
10685     CPW60.......................
               V
               V
10687     SRW60
               V
               V
10695     W60S61
10703          S61
10715          .------->    RS61
10712     DS61RE
10718     CPS61............
               V
               V
10720     S61S62
10728          S62
10740          .------->    RS62
10737     DS62RE
10743     CPS62............
               V
               V
10745     S62S64
10753          S63
10765          .------->    RS63
10762     DS63RE
               V
               V
10768     S63S64
10776          S64
10788          .------->    RS64
10785     DS64RE
10791     CPS64.......................
               V
               V
10793     S64S67
10801          S67
10813          .------->    RS67
10810     DS67RE
10816     CPS67............
               V
               V
10818     S6768A
               V
               V
10826     S6768B
10834          S68
10846          .------->    RS68
10843     DS68RE
10849     CPS68............
               V
               V
10851     S6869A
               V
               V
10859     S6869B
10867          S69
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10879                    .-------->    RS69
10876                DS69RE
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10882            CPS69............
                     V
                     V
10884            S69S70
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10892                S70
                         .
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10905                    .-------->    RS70
10902                DS70RE
                         .
                         .
10908            CPS70............
                     V
                     V
10910            S70S71
                     .
                     .
10918                S71
                         .
                         .
10931                    .-------->    RS71
10928                DS71RE
                         .
                         .
10934            CPS71............
                     V
                     V
10936            S71S78
                     .
                     .
10944                S78
                         .
                         .
10957                    .-------->    RS78
10954                DS78RE
                         .
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10960            CPS78............
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10963                    .<--------    DW61S
10962                DW61SE
                         V
                         V
10964                W61S65
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                         .
10972                    .        S65
                         .          .
                         .          .
10984                    .          .-------->    RS65
10981                    .     DS65RE
                         .          .
                         .          .
10987                CPS65............
                         V
                         V
10989                S65S66
                         .
                         .
10997                    .        S66
                         .          .
                         .          .
11008                    .          .-------->    RS66
11006                    .     DS66RE
                         .          .
                         .          .
11011                CPS66............
                         V
                         V
11013                SRS66
                         V
                         V
11021                S66S75
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11028                    .        S75
                         .          .
                         .          .
11040                    .          .-------->    RS75
11037                    .     DS75RE
                         .          .
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11043                CPS75............
                         V
                         V
11045                S75S76
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11052                    .        S76
                         .          .
                         .          .
11064                    .          .-------->    RS76
11061                    .     DS76RE
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11067                CPS76............
                         V
                         V
11069                S76S77
                         .
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11077                    .        S77
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                         .          .
11089                    .          .-------->    RS77
11086                    .     DS77RE
                         .          .
                         .          .
11092                CPS77............
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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	N07	866.	12.25	113.	37.	12.	.57		
+	DIVERSION TO	RN07	866.	12.25	102.	28.	9.	.57		
+	HYDROGRAPH AT	DN07RE	97.	12.92	27.	9.	3.	.57		
+	DIVERSION TO	DN07AS	43.	12.92	9.	2.	1.	.57		
+	HYDROGRAPH AT	DN07A	55.	12.92	18.	7.	2.	.57		
+	DIVERSION TO	DN07BS	21.	12.92	3.	1.	0.	.57		
+	HYDROGRAPH AT	DN07B	34.	12.92	15.	6.	2.	.57		
+	DIVERSION TO	DN07CS	0.	.00	0.	0.	0.	.57		
+	HYDROGRAPH AT	DN07C	34.	12.92	15.	6.	2.	.57		
+	DIVERSION TO	DN07DS	34.	12.92	15.	6.	2.	.57		
+	HYDROGRAPH AT	DN07D	0.	.00	0.	0.	0.	.57		
+	ROUTED TO	N07N06	0.	.00	0.	0.	0.	.57		
+	HYDROGRAPH AT	N01	619.	12.17	61.	20.	7.	.34		
+	DIVERSION TO	RN01	619.	12.17	51.	14.	5.	.34		
+	HYDROGRAPH AT	DN01RE	156.	12.42	18.	6.	2.	.34		
+	HYDROGRAPH AT	N02A	99.	12.33	12.	4.	1.	.08		
+	DIVERSION TO	RN02A	99.	12.33	12.	4.	1.	.08		
+	HYDROGRAPH AT	DN02AR	0.	.00	0.	0.	0.	.08		
+	ROUTED TO	N2AN01	0.	.00	0.	0.	0.	.08		
+	2 COMBINED AT	CPN01	156.	12.42	18.	6.	2.	.43		
+	ROUTED TO	N01N02	74.	12.58	18.	6.	2.	.43		
+	HYDROGRAPH AT	N02	743.	12.25	67.	20.	7.	.51		
+	DIVERSION TO	RN02	743.	12.25	67.	19.	6.	.51		
+	HYDROGRAPH AT	DN02RE	3.	23.25	1.	0.	0.	.51		
+	HYDROGRAPH AT	N03A	88.	12.25	8.	2.	1.	.06		
+	DIVERSION TO	RN03A	88.	12.25	8.	2.	1.	.06		
+	HYDROGRAPH AT	DN03AR	6.	12.75	1.	0.	0.	.06		
+	ROUTED TO	N3AN02	3.	13.75	1.	0.	0.	.06		
+	3 COMBINED AT	CPN02	72.	12.58	19.	6.	2.	1.00		
+	ROUTED TO	N02N3B	51.	13.25	18.	6.	2.	1.00		
+	HYDROGRAPH AT	N03B	451.	12.17	41.	13.	4.	.28		
+	DIVERSION TO	RN03B	227.	12.00	14.	4.	1.	.28		
+	HYDROGRAPH AT	DN3BRE	451.	12.17	32.	9.	3.	.28		
+	2 COMBINED AT	CPN03B	449.	12.17	48.	15.	5.	1.29		
+	ROUTED TO	N3BN04	211.	12.83	44.	15.	5.	1.29		
+	HYDROGRAPH AT	N04	1067.	12.42	141.	42.	14.	.99		
+	HYDROGRAPH AT	N03	518.	12.25	49.	15.	5.	.36		
	DIVERSION TO									

+	RN03	274.	12.08	17.	5.	2.	.36
+ HYDROGRAPH AT	DN03RE	518.	12.25	36.	10.	3.	.36
+ ROUTED TO	N03N04	238.	12.83	35.	10.	3.	.36
+ HYDROGRAPH AT	N04A	323.	12.17	29.	9.	3.	.20
+ DIVERSION TO	RN04A	323.	12.17	29.	8.	3.	.20
+ HYDROGRAPH AT	DN04AR	4.	15.17	2.	1.	0.	.20
+ ROUTED TO	N4AN04	3.	17.67	2.	1.	0.	.20
+ HYDROGRAPH AT	N04B	258.	12.08	19.	6.	2.	.13
+ DIVERSION TO	RN04B	258.	12.08	18.	5.	2.	.13
+ HYDROGRAPH AT	DN04BR	5.	13.58	2.	1.	0.	.13
+ ROUTED TO	N4BN04	4.	15.42	2.	1.	0.	.13
+ 5 COMBINED AT	CPN04	1067.	12.42	214.	67.	23.	2.97
+ DIVERSION TO	RN04	1065.	12.42	184.	48.	16.	2.97
+ HYDROGRAPH AT	DN04RE	121.	13.83	54.	20.	7.	2.97
+ ROUTED TO	N04N05	108.	14.67	52.	20.	7.	2.97
+ HYDROGRAPH AT	N05	1065.	12.50	157.	46.	16.	1.00
+ DIVERSION TO	RN05	226.	12.00	25.	8.	3.	1.00
+ HYDROGRAPH AT	DN05RE	1065.	12.50	145.	39.	13.	1.00
+ HYDROGRAPH AT	DN07A	43.	12.92	9.	2.	1.	.57
+ ROUTED TO	N7AN05	24.	14.00	8.	2.	1.	.57
+ HYDROGRAPH AT	DN07B	21.	12.92	3.	1.	0.	.57
+ ROUTED TO	N7BN05	11.	14.67	3.	1.	0.	.57
+ HYDROGRAPH AT	DN07C	0.	.00	0.	0.	0.	.57
+ ROUTED TO	N7CN05	0.	.00	0.	0.	0.	.57
+ 5 COMBINED AT	CPN05	1065.	12.50	195.	62.	21.	4.53
+ ROUTED TO	N05N06	981.	12.67	190.	61.	20.	4.53
+ HYDROGRAPH AT	N06	267.	12.33	29.	9.	3.	.22
+ DIVERSION TO	RN06	267.	12.33	27.	7.	2.	.22
+ HYDROGRAPH AT	DN06RE	18.	13.00	5.	2.	1.	.22
+ 3 COMBINED AT	CPN06	981.	12.67	194.	62.	21.	4.75
+ HYDROGRAPH AT	N08	1557.	12.67	259.	77.	26.	1.72
+ HYDROGRAPH AT	N10	692.	12.33	83.	25.	8.	.64
+ ROUTED TO	N10N11	556.	12.75	82.	25.	8.	.64
+ HYDROGRAPH AT	N11	844.	12.33	96.	29.	10.	.70
+ 2 COMBINED AT	CPN11	962.	12.42	177.	53.	18.	1.34
+ ROUTED TO	N11N09	898.	12.67	177.	53.	18.	1.34
+ HYDROGRAPH AT	N09	880.	12.50	128.	39.	13.	.88
+ HYDROGRAPH AT	N14	708.	12.25	66.	19.	6.	.51
+ DIVERSION TO	RN14	708.	12.25	66.	19.	6.	.51
+ HYDROGRAPH AT	DN14RE	0.	.00	0.	0.	0.	.51
3 COMBINED AT							

+	CPN09	1689.	12.58	303.	91.	31.	2.72
+ ROUTED TO	N09N18	1674.	12.58	303.	91.	31.	2.72
+ HYDROGRAPH AT	N18	682.	12.25	71.	22.	7.	.44
+ 2 COMBINED AT	CPN18	1797.	12.58	373.	113.	38.	3.16
+ ROUTED TO	N18N15	1732.	12.67	373.	113.	38.	3.16
+ HYDROGRAPH AT	N12	835.	12.58	138.	40.	13.	.78
+ ROUTED TO	N12N13	833.	12.58	138.	40.	13.	.78
+ HYDROGRAPH AT	N13	701.	12.58	123.	38.	13.	.72
+ 2 COMBINED AT	CPN13	1531.	12.58	260.	78.	26.	1.51
+ ROUTED TO	N13N15	1459.	12.75	260.	78.	26.	1.51
+ HYDROGRAPH AT	N16	481.	12.17	50.	16.	5.	.28
+ DIVERSION TO	RN16	222.	12.00	18.	5.	2.	.28
+ HYDROGRAPH AT	DN16RE	481.	12.17	39.	11.	4.	.28
+ ROUTED TO	N16N15	467.	12.25	39.	11.	4.	.28
+ HYDROGRAPH AT	N15	1027.	12.33	137.	43.	14.	.85
+ 4 COMBINED AT	CPN15	3744.	12.58	798.	242.	81.	5.81
+ ROUTED TO	N15N17	3735.	12.58	798.	242.	81.	5.81
+ HYDROGRAPH AT	N17	1298.	12.50	190.	57.	19.	1.29
+ 2 COMBINED AT	CPN17	4903.	12.58	975.	296.	99.	7.10
+ HYDROGRAPH AT	N20	172.	12.08	16.	5.	2.	.09
+ DIVERSION TO	RN20	10.	11.58	3.	1.	0.	.09
+ HYDROGRAPH AT	DN20RE	172.	12.08	15.	4.	1.	.09
+ ROUTED TO	N20N21	107.	12.42	14.	4.	1.	.09
+ HYDROGRAPH AT	N21	324.	12.25	33.	10.	3.	.19
+ DIVERSION TO	RN21	2.	1.08	0.	0.	0.	.19
+ HYDROGRAPH AT	DN21RE	324.	12.25	33.	10.	3.	.19
+ 2 COMBINED AT	CPN21	366.	12.25	47.	14.	5.	.28
+ DIVERSION TO	DN21S	136.	12.25	17.	5.	2.	.28
+ HYDROGRAPH AT	DN21SE	230.	12.25	29.	9.	3.	.28
+ ROUTED TO	N21N25	177.	12.67	29.	9.	3.	.28
+ HYDROGRAPH AT	N22	203.	12.17	17.	5.	2.	.11
+ HYDROGRAPH AT	DN21SE	136.	12.25	17.	5.	2.	.28
+ ROUTED TO	N21N22	131.	12.33	17.	5.	2.	.28
+ 2 COMBINED AT	CPN22	307.	12.17	34.	10.	3.	.39
+ ROUTED TO	N22N25	232.	12.50	34.	10.	3.	.39
+ HYDROGRAPH AT	N25	766.	12.25	93.	31.	10.	.49
+ DIVERSION TO	RN25	376.	12.00	38.	12.	4.	.49
+ HYDROGRAPH AT	DN25RE	766.	12.25	70.	20.	7.	.49
+ 3 COMBINED AT	CPN25	911.	12.33	133.	39.	13.	.88
+ ROUTED TO	N25N26	801.	12.42	132.	39.	13.	.88
HYDROGRAPH AT							

+		N26	320.	12.33	43.	14.	5.	.26
+	DIVERSION TO	RN26	320.	12.33	43.	13.	4.	.26
+	HYDROGRAPH AT	DN26RE	6.	17.58	4.	1.	0.	.26
+	2 COMBINED AT	CPN26	801.	12.42	133.	40.	13.	1.14
+	HYDROGRAPH AT	N19	372.	12.08	35.	11.	4.	.18
+	HYDROGRAPH AT	N23	833.	12.25	90.	29.	10.	.52
+	DIVERSION TO	RN23	31.	11.00	14.	5.	2.	.52
+	HYDROGRAPH AT	DN23RE	833.	12.25	88.	24.	8.	.52
+	ROUTED TO	N23N24	627.	12.33	86.	24.	8.	.52
+	HYDROGRAPH AT	N24	397.	12.17	38.	12.	4.	.25
+	DIVERSION TO	RN24	388.	12.17	22.	6.	2.	.25
+	HYDROGRAPH AT	DN24RE	362.	12.25	20.	6.	2.	.25
+	2 COMBINED AT	CPN24	911.	12.25	105.	30.	10.	.77
+	HYDROGRAPH AT	N27	177.	12.17	17.	6.	2.	.13
+	DIVERSION TO	RN27	177.	12.17	17.	6.	2.	.13
+	HYDROGRAPH AT	DN27RE	0.	.00	0.	0.	0.	.13
+	4 COMBINED AT	DUMMY	1605.	12.42	269.	80.	27.	2.21
+	4 COMBINED AT	DUMMY	8156.	12.58	1574.	481.	162.	15.78
+	HYDROGRAPH AT	D03	960.	12.25	110.	34.	11.	.72
+	DIVERSION TO	RD03	960.	12.25	96.	26.	9.	.72
+	HYDROGRAPH AT	DD03RE	177.	12.67	25.	8.	3.	.72
+	ROUTED TO	D03D04	110.	12.92	24.	8.	3.	.72
+	HYDROGRAPH AT	D04	1149.	12.33	142.	44.	15.	.89
+	DIVERSION TO	RD04	1118.	12.33	85.	24.	8.	.89
+	HYDROGRAPH AT	DD04RE	1065.	12.42	72.	20.	7.	.89
+	2 COMBINED AT	CPD04	1062.	12.42	95.	28.	9.	1.61
+	DIVERSION TO	DD04S	647.	12.42	30.	7.	2.	1.61
+	HYDROGRAPH AT	DD04SE	414.	12.42	65.	21.	7.	1.61
+	ROUTED TO	D04D05	308.	12.67	64.	21.	7.	1.61
+	HYDROGRAPH AT	D05	325.	12.17	35.	12.	4.	.16
+	DIVERSION TO	RD05	137.	11.92	13.	4.	1.	.16
+	HYDROGRAPH AT	DD05RE	325.	12.17	27.	8.	3.	.16
+	2 COMBINED AT	CPD05	337.	12.67	89.	28.	9.	1.78
+	ROUTED TO	D05D14	272.	12.83	88.	28.	9.	1.78
+	DIVERSION TO	DD141S	150.	12.83	17.	4.	1.	1.78
+	HYDROGRAPH AT	DD141	122.	12.17	71.	24.	8.	1.78
+	ROUTED TO	D05D15	122.	12.92	70.	24.	8.	1.78
+	HYDROGRAPH AT	D11	807.	12.33	108.	34.	11.	.66
+	DIVERSION TO	RD11	807.	12.33	64.	18.	6.	.66
+	HYDROGRAPH AT	DD11RE	686.	12.50	55.	16.	5.	.66
	DIVERSION TO							

+	DD111S	564.	12.50	44.	12.	4.	.66
+ HYDROGRAPH AT	DD111	122.	12.50	11.	3.	1.	.66
+ DIVERSION TO	DD112S	45.	12.50	6.	2.	1.	.66
+ HYDROGRAPH AT	DD112	77.	12.50	5.	1.	0.	.66
+ ROUTED TO	D11D12	49.	12.67	5.	1.	0.	.66
+ HYDROGRAPH AT	D12	438.	12.33	62.	20.	7.	.35
+ DIVERSION TO	RD12	438.	12.33	47.	13.	4.	.35
+ HYDROGRAPH AT	DD12RE	210.	12.67	23.	7.	2.	.35
+ 2 COMBINED AT	CPD12	258.	12.67	28.	8.	3.	1.01
+ DIVERSION TO	DD121S	111.	12.67	10.	3.	1.	1.01
+ HYDROGRAPH AT	DD121	146.	12.67	18.	6.	2.	1.01
+ DIVERSION TO	DD122S	60.	12.67	9.	3.	1.	1.01
+ HYDROGRAPH AT	DD122	86.	12.67	10.	3.	1.	1.01
+ ROUTED TO	D12D13	37.	13.58	9.	3.	1.	1.01
+ HYDROGRAPH AT	D13	1329.	12.33	157.	49.	16.	1.03
+ DIVERSION TO	RD13	1329.	12.33	157.	49.	16.	1.03
+ HYDROGRAPH AT	DD13RE	0.	.00	0.	0.	0.	1.03
+ HYDROGRAPH AT	DD04SE	647.	12.42	30.	7.	2.	1.61
+ ROUTED TO	D04D13	189.	13.50	30.	7.	2.	1.61
+ 3 COMBINED AT	CPD13	220.	13.50	38.	10.	3.	3.65
+ DIVERSION TO	DD131S	8.	13.50	1.	0.	0.	3.65
+ HYDROGRAPH AT	DD131	212.	13.50	37.	10.	3.	3.65
+ DIVERSION TO	DD132S	48.	13.50	8.	2.	1.	3.65
+ HYDROGRAPH AT	DD132	164.	13.50	29.	8.	3.	3.65
+ ROUTED TO	D13D14	136.	14.00	28.	8.	3.	3.65
+ HYDROGRAPH AT	D14	1126.	12.42	157.	50.	17.	.94
+ DIVERSION TO	RD14	1126.	12.42	150.	41.	14.	.94
+ HYDROGRAPH AT	DD14RE	64.	13.50	26.	9.	3.	.94
+ HYDROGRAPH AT	DD141	150.	12.83	17.	4.	1.	1.78
+ ROUTED TO	D0514A	122.	13.08	17.	4.	1.	1.78
+ 3 COMBINED AT	CPD14	188.	14.00	67.	21.	7.	4.76
+ ROUTED TO	SRD14	108.	14.58	66.	21.	7.	4.76
+ DIVERSION TO	DD142S	98.	14.58	60.	19.	6.	4.76
+ HYDROGRAPH AT	DD142	10.	14.58	6.	2.	1.	4.76
+ ROUTED TO	D14D15	9.	14.83	6.	2.	1.	4.76
+ HYDROGRAPH AT	D15	421.	12.17	44.	14.	5.	.22
+ DIVERSION TO	RD15	3.	1.00	1.	0.	0.	.22
+ HYDROGRAPH AT	DD15RE	421.	12.17	44.	14.	5.	.22
+ 3 COMBINED AT	CPD15	423.	12.17	113.	40.	13.	4.98
+ ROUTED TO	D15D26	359.	12.42	112.	40.	13.	4.98
ROUTED TO							

+		D15D28	324.	12.58	112.	40.	13.	4.98
+	HYDROGRAPH AT	D28	428.	12.17	39.	12.	4.	.25
+	DIVERSION TO	RD28	3.	4.08	2.	0.	0.	.25
+	HYDROGRAPH AT	DD28RE	428.	12.17	39.	12.	4.	.25
+	2 COMBINED AT	CPD28	481.	12.25	146.	51.	17.	5.23
+	ROUTED TO	D28AFR	467.	12.25	146.	51.	17.	5.23
+	HYDROGRAPH AT	D26	1103.	12.17	107.	33.	11.	.64
+	DIVERSION TO	RD26	1103.	12.17	107.	31.	10.	.64
+	HYDROGRAPH AT	DD26RE	13.	16.58	9.	3.	1.	.64
+	HYDROGRAPH AT	DD142	98.	14.58	60.	19.	6.	4.76
+	ROUTED TO	D14D26	97.	14.83	60.	19.	6.	4.76
+	2 COMBINED AT	CPD26	95.	14.83	62.	21.	7.	5.40
+	ROUTED TO	D26D27	95.	15.00	62.	21.	7.	5.40
+	HYDROGRAPH AT	D27	498.	12.17	52.	17.	6.	.32
+	DIVERSION TO	RD27	100.	11.92	13.	4.	1.	.32
+	HYDROGRAPH AT	DD27RE	498.	12.17	45.	12.	4.	.32
+	2 COMBINED AT	CPD27	491.	12.17	98.	33.	11.	5.72
+	ROUTED TO	SRD27	491.	12.17	98.	33.	11.	5.72
+	ROUTED TO	D27D42	345.	12.58	92.	33.	11.	5.72
+	HYDROGRAPH AT	D20	595.	12.33	72.	22.	7.	.50
+	DIVERSION TO	RD20	595.	12.33	72.	21.	7.	.50
+	HYDROGRAPH AT	DD20RE	6.	18.33	5.	1.	0.	.50
+	HYDROGRAPH AT	DD111	564.	12.50	44.	12.	4.	.66
+	ROUTED TO	D11D20	292.	12.92	42.	12.	4.	.66
+	2 COMBINED AT	CPD20	291.	12.92	42.	14.	5.	1.16
+	ROUTED TO	D20D21	210.	13.42	40.	14.	5.	1.16
+	HYDROGRAPH AT	D21	565.	12.33	72.	22.	7.	.50
+	DIVERSION TO	RD21	565.	12.33	72.	20.	7.	.50
+	HYDROGRAPH AT	DD21RE	9.	15.92	6.	2.	1.	.50
+	HYDROGRAPH AT	DD112	45.	12.50	6.	2.	1.	.66
+	ROUTED TO	D11D21	20.	13.33	5.	2.	1.	.66
+	HYDROGRAPH AT	DD121	111.	12.67	10.	3.	1.	1.01
+	ROUTED TO	D12D21	76.	12.83	9.	3.	1.	1.01
+	4 COMBINED AT	CPD21	244.	13.33	57.	20.	7.	2.00
+	DIVERSION TO	DD211S	172.	13.33	43.	15.	5.	2.00
+	HYDROGRAPH AT	DD211	72.	13.33	15.	5.	2.	2.00
+	DIVERSION TO	DD212S	44.	13.33	11.	4.	1.	2.00
+	HYDROGRAPH AT	DD212	28.	13.33	4.	1.	0.	2.00
+	ROUTED TO	D21D22	18.	13.75	3.	1.	0.	2.00
+	HYDROGRAPH AT	D22	562.	12.33	67.	21.	7.	.45
	DIVERSION TO							

+	RD22	562.	12.33	67.	19.	6.	.45
+ HYDROGRAPH AT	DD22RE	8.	16.75	5.	2.	1.	.45
+ HYDROGRAPH AT	DD122	60.	12.67	9.	3.	1.	1.01
+ ROUTED TO	D12D22	35.	13.25	8.	3.	1.	1.01
+ 3 COMBINED AT	CPD22	37.	13.67	14.	5.	2.	2.46
+ ROUTED TO	D22D23	35.	13.83	14.	5.	2.	2.46
+ HYDROGRAPH AT	D23	649.	12.33	82.	25.	8.	.54
+ DIVERSION TO	RD23	649.	12.33	82.	25.	8.	.54
+ HYDROGRAPH AT	DD23RE	5.	23.08	2.	0.	0.	.54
+ HYDROGRAPH AT	DD131	8.	13.50	1.	0.	0.	3.65
+ ROUTED TO	D13D23	6.	14.08	1.	0.	0.	3.65
+ 3 COMBINED AT	CPD23	38.	13.92	14.	6.	2.	5.64
+ DIVERSION TO	DD231S	4.	13.92	1.	1.	0.	5.64
+ HYDROGRAPH AT	DD231	34.	13.92	13.	5.	2.	5.64
+ DIVERSION TO	DD232S	4.	13.92	2.	1.	0.	5.64
+ HYDROGRAPH AT	DD232	30.	13.92	11.	5.	2.	5.64
+ ROUTED TO	D23D24	29.	14.17	11.	5.	2.	5.64
+ HYDROGRAPH AT	D24	538.	12.42	71.	21.	7.	.49
+ DIVERSION TO	RD24	538.	12.42	71.	21.	7.	.49
+ HYDROGRAPH AT	DD24RE	4.	21.08	2.	1.	0.	.49
+ HYDROGRAPH AT	DD132	48.	13.50	8.	2.	1.	3.65
+ ROUTED TO	D13D24	40.	13.92	8.	2.	1.	3.65
+ 3 COMBINED AT	CPD24	64.	14.00	18.	7.	2.	6.13
+ ROUTED TO	D24D25	62.	14.25	18.	7.	2.	6.13
+ HYDROGRAPH AT	D25	574.	12.33	72.	22.	7.	.50
+ DIVERSION TO	RD25	574.	12.33	69.	19.	6.	.50
+ HYDROGRAPH AT	DD25RE	21.	13.58	9.	3.	1.	.50
+ 2 COMBINED AT	CPD25	69.	14.25	25.	9.	3.	6.63
+ ROUTED TO	D25D39	67.	14.42	25.	9.	3.	6.63
+ HYDROGRAPH AT	D39	354.	12.08	30.	9.	3.	.18
+ DIVERSION TO	RD39	354.	12.08	30.	9.	3.	.18
+ HYDROGRAPH AT	DD39RE	0.	.00	0.	0.	0.	.18
+ 2 COMBINED AT	CPD39	67.	14.42	25.	9.	3.	6.81
+ ROUTED TO	D39D42	52.	15.42	24.	9.	3.	6.81
+ HYDROGRAPH AT	D42	1338.	12.25	155.	48.	16.	.99
+ DIVERSION TO	RD42	1338.	12.25	142.	38.	13.	.99
+ HYDROGRAPH AT	DD42RE	123.	12.83	28.	9.	3.	.99
+ 3 COMBINED AT	CPD42	345.	12.58	139.	52.	17.	9.87
+ ROUTED TO	SRD42	178.	12.83	115.	44.	15.	9.87
+ ROUTED TO	D42D53	174.	13.08	114.	44.	15.	9.87
HYDROGRAPH AT							

+		D53	195.	12.17	16.	5.	2.	.12
+	DIVERSION TO	RD53	195.	12.17	16.	5.	2.	.12
+	HYDROGRAPH AT	DD53RE	0.	.00	0.	0.	0.	.12
+	2 COMBINED AT	CPD53	174.	13.08	114.	44.	15.	9.99
+	ROUTED TO	SRD53	54.	21.08	36.	10.	3.	9.99
+	ROUTED TO	D53D54	47.	21.67	35.	10.	3.	9.99
+	HYDROGRAPH AT	D43	651.	12.33	77.	24.	8.	.50
+	DIVERSION TO	RD43	651.	12.33	72.	19.	6.	.50
+	HYDROGRAPH AT	DD43RE	43.	13.08	13.	5.	2.	.50
+	ROUTED TO	D43D54	27.	14.25	13.	5.	2.	.50
+	HYDROGRAPH AT	D54	369.	12.25	34.	10.	3.	.27
+	DIVERSION TO	RD54	290.	12.17	16.	5.	2.	.27
+	HYDROGRAPH AT	DD54RE	369.	12.25	21.	6.	2.	.27
+	3 COMBINED AT	CPD54	335.	12.25	36.	18.	6.	10.76
+	HYDROGRAPH AT	D44	625.	12.33	78.	24.	8.	.54
+	DIVERSION TO	RD44	625.	12.33	60.	16.	5.	.54
+	HYDROGRAPH AT	DD44RE	323.	12.58	26.	8.	3.	.54
+	HYDROGRAPH AT	D55	249.	12.25	24.	7.	2.	.19
+	DIVERSION TO	RD55	249.	12.25	20.	5.	2.	.19
+	HYDROGRAPH AT	DD55RE	92.	12.50	7.	2.	1.	.19
+	HYDROGRAPH AT	D56	276.	12.25	30.	9.	3.	.22
+	DIVERSION TO	RD56	103.	12.00	8.	2.	1.	.22
+	HYDROGRAPH AT	DD56RE	276.	12.25	25.	7.	2.	.22
+	4 COMBINED AT	DUMMY	587.	12.25	76.	32.	11.	11.71
+	3 COMBINED AT	DUMMY	8183.	12.50	1649.	512.	172.	32.72
+	HYDROGRAPH AT	D52	658.	12.42	82.	24.	8.	.59
+	DIVERSION TO	RD52	12.	10.67	7.	2.	1.	.59
+	HYDROGRAPH AT	DD52RE	658.	12.42	81.	22.	7.	.59
+	ROUTED TO	D52D66	441.	13.08	81.	22.	7.	.59
+	HYDROGRAPH AT	D66	440.	12.25	49.	16.	5.	.30
+	DIVERSION TO	RD66	440.	12.25	49.	16.	5.	.30
+	HYDROGRAPH AT	DD66RE	0.	.00	0.	0.	0.	.30
+	2 COMBINED AT	CPD66	441.	13.08	81.	22.	7.	.89
+	ROUTED TO	D66D67	435.	13.17	81.	22.	7.	.89
+	HYDROGRAPH AT	D67	467.	12.25	52.	17.	6.	.32
+	DIVERSION TO	RD67	317.	12.08	24.	7.	2.	.32
+	HYDROGRAPH AT	DD67RE	467.	12.25	34.	10.	3.	.32
+	2 COMBINED AT	CPD67	550.	12.33	114.	31.	10.	1.20
+	HYDROGRAPH AT	D76	171.	12.25	19.	6.	2.	.11
+	DIVERSION TO	RD76	128.	12.08	9.	3.	1.	.11
	HYDROGRAPH AT							

+	DD76RE	171.	12.25	12.	3.	1.	.11
+ ROUTED TO	D76D77	143.	12.33	12.	3.	1.	.11
+ HYDROGRAPH AT	D77	630.	12.17	65.	22.	7.	.36
+ 2 COMBINED AT	CPD77	665.	12.25	76.	25.	8.	.47
+ 3 COMBINED AT	DUMMY	8751.	12.50	1804.	558.	188.	34.40
+ HYDROGRAPH AT	D35	444.	12.17	38.	12.	4.	.25
+ DIVERSION TO	RD35	444.	12.17	38.	12.	4.	.25
+ HYDROGRAPH AT	DD35RE	0.	.00	0.	0.	0.	.25
+ HYDROGRAPH AT	DD231	4.	13.92	1.	1.	0.	5.64
+ ROUTED TO	D23D35	3.	14.50	1.	1.	0.	5.64
+ 2 COMBINED AT	CPD35	3.	14.50	1.	1.	0.	5.90
+ DIVERSION TO	DD35S	1.	14.50	0.	0.	0.	5.90
+ HYDROGRAPH AT	DD35SE	3.	14.50	1.	0.	0.	5.90
+ ROUTED TO	D35D38	3.	15.17	1.	0.	0.	5.90
+ HYDROGRAPH AT	D38	446.	12.25	52.	16.	5.	.32
+ DIVERSION TO	RD38	446.	12.25	52.	16.	5.	.32
+ HYDROGRAPH AT	DD38RE	0.	.00	0.	0.	0.	.32
+ HYDROGRAPH AT	DD232	4.	13.92	2.	1.	0.	5.64
+ ROUTED TO	D23D38	4.	14.83	1.	1.	0.	5.64
+ 3 COMBINED AT	CPD38	6.	14.92	2.	1.	0.	6.22
+ ROUTED TO	D38D40	5.	16.33	2.	1.	0.	6.22
+ HYDROGRAPH AT	D32	361.	12.25	38.	12.	4.	.25
+ DIVERSION TO	RD32	361.	12.25	38.	12.	4.	.25
+ HYDROGRAPH AT	DD32RE	0.	.00	0.	0.	0.	.25
+ DIVERSION TO	DD32S	0.	.00	0.	0.	0.	.25
+ HYDROGRAPH AT	DD32SE	0.	.00	0.	0.	0.	.25
+ ROUTED TO	D32D33	0.	.00	0.	0.	0.	.25
+ HYDROGRAPH AT	D31	667.	12.25	73.	22.	7.	.50
+ DIVERSION TO	RD31	667.	12.25	73.	22.	7.	.50
+ HYDROGRAPH AT	DD31RE	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DD211	172.	13.33	43.	15.	5.	2.00
+ ROUTED TO	D21D31	166.	13.50	42.	15.	5.	2.00
+ 2 COMBINED AT	CPD31	166.	13.50	42.	15.	5.	2.50
+ ROUTED TO	D31D33	150.	13.67	42.	15.	5.	2.50
+ HYDROGRAPH AT	D33	377.	12.25	38.	12.	4.	.25
+ DIVERSION TO	RD33	377.	12.25	35.	9.	3.	.25
+ HYDROGRAPH AT	DD33RE	31.	12.75	7.	2.	1.	.25
+ 3 COMBINED AT	CPD33	160.	13.67	48.	17.	6.	3.00
+ DIVERSION TO	DD331S	87.	13.67	26.	9.	3.	3.00
+ HYDROGRAPH AT	DD331	73.	13.67	22.	8.	3.	3.00
DIVERSION TO							

+	DD332S	34.	13.67	11.	4.	1.	3.00
+ HYDROGRAPH AT	DD332	39.	13.67	11.	4.	1.	3.00
+ ROUTED TO	D33D34	34.	14.08	11.	4.	1.	3.00
+ HYDROGRAPH AT	D34	697.	12.25	75.	24.	8.	.50
+ DIVERSION TO	RD34	697.	12.25	75.	24.	8.	.50
+ HYDROGRAPH AT	DD34RE	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DD212	44.	13.33	11.	4.	1.	2.00
+ ROUTED TO	D21D34	38.	13.75	11.	4.	1.	2.00
+ 3 COMBINED AT	CPD34	67.	13.92	22.	8.	3.	3.50
+ ROUTED TO	D34D36	62.	14.33	21.	8.	3.	3.50
+ HYDROGRAPH AT	D36	404.	12.17	38.	12.	4.	.25
+ DIVERSION TO	RD36	404.	12.17	35.	9.	3.	.25
+ HYDROGRAPH AT	DD36RE	22.	12.75	7.	2.	1.	.25
+ HYDROGRAPH AT	DD35SE	1.	14.50	0.	0.	0.	5.90
+ ROUTED TO	D35D36	0.	15.25	0.	0.	0.	5.90
+ 3 COMBINED AT	CPD36	63.	14.42	24.	9.	3.	7.64
+ DIVERSION TO	DD361S	58.	14.42	22.	9.	3.	7.64
+ HYDROGRAPH AT	DD361	5.	14.42	2.	1.	0.	7.64
+ DIVERSION TO	DD362S	5.	14.42	2.	1.	0.	7.64
+ HYDROGRAPH AT	DD362	0.	.00	0.	0.	0.	7.64
+ ROUTED TO	D36D40	0.	.00	0.	0.	0.	7.64
+ HYDROGRAPH AT	D40	451.	12.17	40.	12.	4.	.24
+ DIVERSION TO	RD40	451.	12.17	40.	12.	4.	.24
+ HYDROGRAPH AT	DD40RE	0.	.00	0.	0.	0.	.24
+ 3 COMBINED AT	CPD40	5.	16.33	2.	1.	0.	8.20
+ ROUTED TO	D4049A	4.	16.83	2.	1.	0.	8.20
+ ROUTED TO	D4049B	4.	17.25	2.	1.	0.	8.20
+ HYDROGRAPH AT	D47	1066.	12.42	152.	47.	16.	1.00
+ DIVERSION TO	RD47	1066.	12.42	152.	47.	16.	1.00
+ HYDROGRAPH AT	DD47RE	0.	.00	0.	0.	0.	1.00
+ HYDROGRAPH AT	DD32SE	0.	.00	0.	0.	0.	.25
+ ROUTED TO	D3247A	0.	.00	0.	0.	0.	.25
+ ROUTED TO	D3247B	0.	.00	0.	0.	0.	.25
+ HYDROGRAPH AT	DD331	87.	13.67	26.	9.	3.	3.00
+ ROUTED TO	D3347A	78.	14.00	26.	9.	3.	3.00
+ ROUTED TO	D3347B	74.	14.25	25.	9.	3.	3.00
+ 3 COMBINED AT	CPD47	74.	14.25	25.	9.	3.	3.99
+ DIVERSION TO	DD47S	65.	14.25	22.	8.	3.	3.99
+ HYDROGRAPH AT	DD47SE	9.	14.25	3.	1.	0.	3.99
+ ROUTED TO	D47D48	7.	15.42	3.	1.	0.	3.99
HYDROGRAPH AT							

+	D48	949.	12.50	134.	39.	13.	1.00
+ DIVERSION TO	RD48	949.	12.50	134.	39.	13.	1.00
+ HYDROGRAPH AT	DD48RE	1.	22.08	0.	0.	0.	1.00
+ HYDROGRAPH AT	DD332	34.	13.67	11.	4.	1.	3.00
+ ROUTED TO	D33D48	28.	14.83	10.	4.	1.	3.00
+ HYDROGRAPH AT	DD361	58.	14.42	22.	9.	3.	7.64
+ ROUTED TO	D3648A	53.	14.92	22.	9.	3.	7.64
+ ROUTED TO	D3648B	52.	15.08	22.	9.	3.	7.64
+ 4 COMBINED AT	CPD48	74.	15.08	32.	13.	4.	9.63
+ DIVERSION TO	DD481S	63.	15.08	28.	11.	4.	9.63
+ HYDROGRAPH AT	DD481	11.	15.08	5.	2.	1.	9.63
+ DIVERSION TO	DD482S	3.	15.08	1.	0.	0.	9.63
+ HYDROGRAPH AT	DD482	8.	15.08	4.	1.	0.	9.63
+ ROUTED TO	D48D49	8.	15.42	4.	1.	0.	9.63
+ HYDROGRAPH AT	D49	724.	12.25	75.	24.	8.	.49
+ DIVERSION TO	RD49	27.	11.17	11.	4.	1.	.49
+ HYDROGRAPH AT	DD49RE	724.	12.25	73.	20.	7.	.49
+ HYDROGRAPH AT	DD362	5.	14.42	2.	1.	0.	7.64
+ ROUTED TO	D36D49	4.	16.00	2.	1.	0.	7.64
+ 4 COMBINED AT	CPD49	724.	12.25	78.	23.	8.	10.69
+ ROUTED TO	D49D63	519.	12.33	72.	22.	7.	10.69
+ HYDROGRAPH AT	D60	710.	12.17	87.	30.	10.	.40
+ DIVERSION TO	RD60	710.	12.17	70.	20.	7.	.40
+ HYDROGRAPH AT	DD60RE	192.	12.50	31.	10.	3.	.40
+ HYDROGRAPH AT	DD481	63.	15.08	28.	11.	4.	9.63
+ ROUTED TO	D48D60	61.	15.33	27.	11.	4.	9.63
+ 2 COMBINED AT	CPD60	304.	12.50	57.	22.	7.	10.04
+ ROUTED TO	D60D63	106.	12.67	49.	19.	6.	10.04
+ HYDROGRAPH AT	D63	454.	12.08	49.	17.	6.	.22
+ DIVERSION TO	RD63	454.	12.08	43.	12.	4.	.22
+ HYDROGRAPH AT	DD63RE	47.	12.58	14.	5.	2.	.22
+ HYDROGRAPH AT	DD482	3.	15.08	1.	0.	0.	9.63
+ ROUTED TO	D48D63	2.	19.42	1.	0.	0.	9.63
+ 4 COMBINED AT	CPD63	519.	12.33	128.	46.	15.	11.31
+ ROUTED TO	SRD63	105.	13.50	85.	45.	15.	11.31
+ ROUTED TO	D63D64	104.	13.92	84.	45.	15.	11.31
+ HYDROGRAPH AT	D62	492.	12.17	54.	18.	6.	.25
+ DIVERSION TO	RD62	492.	12.17	45.	13.	4.	.25
+ HYDROGRAPH AT	DD62RE	82.	12.42	17.	6.	2.	.25
+ DIVERSION TO	DD621S	60.	12.42	13.	4.	1.	.25
HYDROGRAPH AT							

+		DD621	22.	12.42	4.	1.	0.	.25
+	DIVERSION TO	DD622S	9.	12.42	2.	1.	0.	.25
+	HYDROGRAPH AT	DD622	13.	12.42	2.	1.	0.	.25
+	ROUTED TO	D62D64	5.	13.42	2.	1.	0.	.25
+	HYDROGRAPH AT	D64	534.	12.17	59.	20.	7.	.27
+	DIVERSION TO	RD64	534.	12.17	48.	13.	4.	.27
+	HYDROGRAPH AT	DD64RE	133.	12.42	21.	7.	2.	.27
+	3 COMBINED AT	CPD64	127.	13.75	98.	51.	17.	11.84
+	ROUTED TO	D64D74	125.	14.33	98.	51.	17.	11.84
+	HYDROGRAPH AT	D73A	389.	12.17	40.	13.	4.	.24
+	DIVERSION TO	RD73A	389.	12.17	24.	7.	2.	.24
+	HYDROGRAPH AT	DD73AR	303.	12.25	21.	6.	2.	.24
+	HYDROGRAPH AT	DD621	60.	12.42	13.	4.	1.	.25
+	ROUTED TO	D6273A	37.	12.92	12.	4.	1.	.25
+	2 COMBINED AT	CPD73A	303.	12.25	33.	10.	3.	.49
+	ROUTED TO	D73A74	145.	12.42	31.	10.	3.	.49
+	HYDROGRAPH AT	D74	538.	12.25	70.	24.	8.	.31
+	DIVERSION TO	RD74	538.	12.25	61.	17.	6.	.31
+	HYDROGRAPH AT	DD74RE	77.	12.67	21.	7.	2.	.31
+	HYDROGRAPH AT	DD622	9.	12.42	2.	1.	0.	.25
+	ROUTED TO	D62D74	5.	14.50	2.	1.	0.	.25
+	4 COMBINED AT	CPD74	174.	14.17	130.	66.	22.	12.39
+	ROUTED TO	SRD74	111.	18.08	101.	62.	22.	12.39
+	HYDROGRAPH AT	D78A	307.	12.25	41.	14.	5.	.18
+	DIVERSION TO	RD78A	307.	12.25	36.	10.	3.	.18
+	HYDROGRAPH AT	DD78AR	45.	12.75	12.	4.	1.	.18
+	2 COMBINED AT	CPD78A	117.	17.92	106.	66.	23.	12.58
+	ROUTED TO	D78ACP	117.	18.00	106.	65.	23.	12.58
+	HYDROGRAPH AT	D41	557.	12.08	47.	14.	5.	.25
+	DIVERSION TO	RD41	557.	12.08	47.	14.	5.	.25
+	HYDROGRAPH AT	DD41RE	4.	19.25	2.	1.	0.	.25
+	ROUTED TO	D41D50	3.	21.42	2.	1.	0.	.25
+	HYDROGRAPH AT	D50	774.	12.25	92.	29.	10.	.50
+	DIVERSION TO	RD50	774.	12.25	92.	26.	9.	.50
+	HYDROGRAPH AT	DD50RE	11.	16.00	8.	3.	1.	.50
+	2 COMBINED AT	CPD50	11.	16.00	9.	3.	1.	.76
+	ROUTED TO	D5064A	10.	17.75	8.	3.	1.	.76
+	HYDROGRAPH AT	D64A	748.	12.25	80.	26.	9.	.50
+	DIVERSION TO	RD64A	748.	12.25	80.	26.	9.	.50
+	HYDROGRAPH AT	DD64AR	0.	.00	0.	0.	0.	.50
	2 COMBINED AT							

+	CPD64A	10.	17.75	8.	3.	1.	1.25
+ ROUTED TO	64A74A	10.	18.42	8.	3.	1.	1.25
+ HYDROGRAPH AT	D74A	775.	12.25	91.	30.	10.	.49
+ DIVERSION TO	RD74A	775.	12.25	73.	20.	7.	.49
+ HYDROGRAPH AT	DD74AR	258.	12.50	31.	10.	3.	.49
+ 2 COMBINED AT	CPD74A	257.	12.50	32.	13.	4.	1.75
+ ROUTED TO	D74A78	200.	12.58	31.	13.	4.	1.75
+ 2 COMBINED AT	CP7874	128.	12.67	114.	74.	26.	14.32
+ ROUTED TO	78A78B	125.	18.17	114.	73.	26.	14.32
+ HYDROGRAPH AT	D06	616.	12.33	77.	23.	8.	.46
+ DIVERSION TO	RD06	616.	12.33	60.	16.	5.	.46
+ HYDROGRAPH AT	DD06RE	252.	12.67	24.	7.	2.	.46
+ DIVERSION TO	DD06S	0.	.00	0.	0.	0.	.46
+ HYDROGRAPH AT	DD06SE	252.	12.67	24.	7.	2.	.46
+ ROUTED TO	D06D07	162.	12.75	23.	7.	2.	.46
+ HYDROGRAPH AT	D07	919.	12.50	134.	40.	13.	.89
+ DIVERSION TO	RD07	919.	12.50	116.	31.	10.	.89
+ HYDROGRAPH AT	DD07RE	250.	13.00	29.	9.	3.	.89
+ 2 COMBINED AT	CPD07	348.	13.00	51.	16.	5.	1.35
+ ROUTED TO	D07D02	252.	13.08	50.	16.	5.	1.35
+ HYDROGRAPH AT	D01	1347.	12.58	212.	63.	21.	1.56
+ DIVERSION TO	RD01	1347.	12.58	184.	49.	16.	1.56
+ HYDROGRAPH AT	DD01RE	334.	13.17	46.	14.	5.	1.56
+ ROUTED TO	D01D02	146.	14.42	42.	14.	5.	1.56
+ HYDROGRAPH AT	D02	1750.	12.50	266.	80.	27.	1.84
+ DIVERSION TO	RD02	1750.	12.50	237.	63.	21.	1.84
+ HYDROGRAPH AT	DD02RE	378.	13.08	53.	17.	6.	1.84
+ 3 COMBINED AT	CPD02	617.	13.08	139.	46.	15.	4.76
+ ROUTED TO	D02D10	479.	13.33	137.	46.	15.	4.76
+ HYDROGRAPH AT	D09	360.	12.33	42.	13.	4.	.26
+ DIVERSION TO	RD09	360.	12.33	29.	8.	3.	.26
+ HYDROGRAPH AT	DD09RE	225.	12.50	18.	5.	2.	.26
+ ROUTED TO	D09D10	170.	12.58	17.	5.	2.	.26
+ HYDROGRAPH AT	DD06SE	0.	.00	0.	0.	0.	.46
+ ROUTED TO	D06D10	0.	.00	0.	0.	0.	.46
+ HYDROGRAPH AT	D10	787.	12.33	104.	32.	11.	.63
+ DIVERSION TO	RD10	787.	12.33	83.	23.	8.	.63
+ HYDROGRAPH AT	DD10RE	354.	12.67	32.	10.	3.	.63
+ 4 COMBINED AT	CPD10	500.	13.33	175.	59.	20.	5.65
+ ROUTED TO	D10D19	460.	13.50	173.	59.	20.	5.65
HYDROGRAPH AT							

+		D08	661.	12.33	91.	29.	10.	.51
+	DIVERSION TO	RD08	661.	12.33	73.	20.	7.	.51
+	HYDROGRAPH AT	DD08RE	283.	12.67	29.	9.	3.	.51
+	ROUTED TO	D08D16	139.	13.08	28.	9.	3.	.51
+	HYDROGRAPH AT	D16	922.	12.17	116.	40.	13.	.52
+	DIVERSION TO	RD16	922.	12.17	94.	27.	9.	.52
+	HYDROGRAPH AT	DD16RE	263.	12.50	42.	13.	4.	.52
+	2 COMBINED AT	CPD16	263.	12.50	68.	22.	7.	1.03
+	DIVERSION TO	DD161S	213.	12.50	53.	17.	6.	1.03
+	HYDROGRAPH AT	DD161	50.	12.50	16.	5.	2.	1.03
+	DIVERSION TO	DD162S	19.	12.50	7.	3.	1.	1.03
+	HYDROGRAPH AT	DD162	30.	12.50	8.	3.	1.	1.03
+	ROUTED TO	D16D18	22.	13.42	8.	3.	1.	1.03
+	HYDROGRAPH AT	D18	321.	12.17	28.	9.	3.	.20
+	DIVERSION TO	RD18	321.	12.17	28.	9.	3.	.20
+	HYDROGRAPH AT	DD18RE	0.	21.42	0.	0.	0.	.20
+	2 COMBINED AT	CPD18	22.	13.42	8.	3.	1.	1.23
+	ROUTED TO	D18D19	20.	13.50	8.	3.	1.	1.23
+	HYDROGRAPH AT	D17	324.	12.17	28.	9.	3.	.20
+	DIVERSION TO	RD17	324.	12.17	28.	8.	3.	.20
+	HYDROGRAPH AT	DD17RE	2.	20.17	1.	0.	0.	.20
+	ROUTED TO	D17D19	2.	21.67	1.	0.	0.	.20
+	HYDROGRAPH AT	D19	577.	12.33	71.	21.	7.	.51
+	DIVERSION TO	RD19	577.	12.33	71.	20.	7.	.51
+	HYDROGRAPH AT	DD19RE	5.	18.58	4.	1.	0.	.51
+	4 COMBINED AT	CPD19	437.	13.50	174.	61.	20.	7.58
+	ROUTED TO	D19D30	372.	13.83	164.	59.	20.	7.58
+	HYDROGRAPH AT	D29	910.	12.17	114.	39.	13.	.51
+	DIVERSION TO	RD29	910.	12.17	93.	26.	9.	.51
+	HYDROGRAPH AT	DD29RE	251.	12.50	39.	13.	4.	.51
+	HYDROGRAPH AT	DD161	213.	12.50	53.	17.	6.	1.03
+	ROUTED TO	D16D29	157.	13.42	51.	17.	6.	1.03
+	2 COMBINED AT	CPD29	250.	12.50	88.	30.	10.	1.54
+	ROUTED TO	D29D30	198.	13.58	86.	30.	10.	1.54
+	HYDROGRAPH AT	D30	1541.	12.25	203.	70.	23.	.91
+	DIVERSION TO	RD30	1541.	12.25	174.	49.	16.	.91
+	HYDROGRAPH AT	DD30RE	282.	12.67	62.	21.	7.	.91
+	HYDROGRAPH AT	DD162	19.	12.50	7.	3.	1.	1.03
+	ROUTED TO	D16D30	14.	14.25	7.	3.	1.	1.03
+	4 COMBINED AT	CPD30	594.	13.83	292.	105.	35.	9.01
	ROUTED TO							

+		D30D46	573.	14.00	287.	105.	35.	9.01
+	HYDROGRAPH AT	D45	780.	12.25	92.	31.	10.	.49
+	DIVERSION TO	RD45	780.	12.25	79.	22.	7.	.49
+	HYDROGRAPH AT	DD45RE	167.	12.58	27.	9.	3.	.49
+	DIVERSION TO	DD451S	24.	12.58	4.	1.	0.	.49
+	HYDROGRAPH AT	DD451	142.	12.58	23.	7.	2.	.49
+	DIVERSION TO	DD452S	68.	12.58	11.	4.	1.	.49
+	HYDROGRAPH AT	DD452	74.	12.58	11.	4.	1.	.49
+	ROUTED TO	D45D46	31.	13.33	11.	4.	1.	.49
+	HYDROGRAPH AT	D46	982.	12.42	139.	43.	14.	.92
+	DIVERSION TO	RD46	982.	12.42	139.	42.	14.	.92
+	HYDROGRAPH AT	DD46RE	8.	22.17	4.	1.	0.	.92
+	3 COMBINED AT	CPD46	573.	14.00	290.	106.	35.	10.41
+	ROUTED TO	D46D58	552.	14.17	286.	105.	35.	10.41
+	DIVERSION TO	SSPILL	151.	14.92	93.	37.	12.	10.41
+	HYDROGRAPH AT	RMSBSN	472.	14.42	192.	68.	23.	10.41
+	HYDROGRAPH AT	RMSBSN	151.	14.92	93.	37.	12.	10.41
+	ROUTED TO	SRREEM	32.	25.00	31.	26.	12.	10.41
+	2 COMBINED AT	CPRMS	481.	14.42	210.	93.	35.	10.41
+	ROUTED TO	RRMS	459.	14.42	209.	93.	35.	10.41
+	HYDROGRAPH AT	D57	909.	12.17	109.	38.	13.	.48
+	DIVERSION TO	RD57	909.	12.17	88.	25.	8.	.48
+	HYDROGRAPH AT	DD57RE	277.	12.42	40.	13.	4.	.48
+	HYDROGRAPH AT	DD451	24.	12.58	4.	1.	0.	.49
+	ROUTED TO	D45D57	11.	13.33	4.	1.	0.	.49
+	2 COMBINED AT	CPD57	277.	12.42	43.	14.	5.	.97
+	ROUTED TO	D57D58	140.	12.75	41.	14.	5.	.97
+	HYDROGRAPH AT	D58	1239.	12.25	149.	47.	16.	.92
+	DIVERSION TO	RD58	1239.	12.25	126.	35.	12.	.92
+	HYDROGRAPH AT	DD58RE	283.	12.67	41.	13.	4.	.92
+	HYDROGRAPH AT	DD452	68.	12.58	11.	4.	1.	.49
+	ROUTED TO	D45D58	30.	13.50	11.	4.	1.	.49
+	4 COMBINED AT	CPD58	509.	14.42	264.	116.	43.	11.81
+	ROUTED TO	D5869A	497.	14.58	260.	115.	43.	11.81
+	HYDROGRAPH AT	D68A	507.	12.08	44.	15.	5.	.24
+	DIVERSION TO	RD68A	507.	12.08	42.	12.	4.	.24
+	HYDROGRAPH AT	DD68AR	18.	13.42	8.	3.	1.	.24
+	ROUTED TO	68A69A	14.	14.17	8.	3.	1.	.24
+	HYDROGRAPH AT	D69A	804.	12.17	72.	23.	8.	.46
+	DIVERSION TO	RD69A	804.	12.17	69.	19.	6.	.46
	HYDROGRAPH AT							

+		DD69AR	26.	13.33	11.	4.	1.	.46
+	3 COMBINED AT	CPD69A	493.	14.58	269.	119.	44.	12.52
+	ROUTED TO	D69A70	462.	15.25	265.	118.	44.	12.52
+	HYDROGRAPH AT	D68	506.	12.08	55.	19.	6.	.25
+	DIVERSION TO	RD68	506.	12.08	44.	13.	4.	.25
+	HYDROGRAPH AT	DD68RE	133.	12.33	19.	6.	2.	.25
+	DIVERSION TO	DD681S	105.	12.33	15.	5.	2.	.25
+	HYDROGRAPH AT	DD681	28.	12.33	4.	1.	0.	.25
+	DIVERSION TO	DD682S	9.	12.33	1.	0.	0.	.25
+	HYDROGRAPH AT	DD682	19.	12.33	3.	1.	0.	.25
+	ROUTED TO	D68D69	9.	12.83	3.	1.	0.	.25
+	HYDROGRAPH AT	D69	664.	12.25	71.	22.	7.	.46
+	DIVERSION TO	RD69	664.	12.25	68.	19.	6.	.46
+	HYDROGRAPH AT	DD69RE	23.	13.50	10.	4.	1.	.46
+	2 COMBINED AT	CPD69	28.	13.50	12.	4.	1.	.71
+	DIVERSION TO	DD691S	2.	13.50	1.	0.	0.	.71
+	HYDROGRAPH AT	DD691	26.	13.50	11.	4.	1.	.71
+	DIVERSION TO	DD692S	2.	13.50	1.	0.	0.	.71
+	HYDROGRAPH AT	DD692	24.	13.50	11.	4.	1.	.71
+	ROUTED TO	D69D70	20.	14.00	10.	4.	1.	.71
+	HYDROGRAPH AT	D70	330.	12.17	25.	7.	2.	.26
+	DIVERSION TO	RD70	1.	9.00	1.	0.	0.	.26
+	HYDROGRAPH AT	DD70RE	330.	12.17	25.	7.	2.	.26
+	HYDROGRAPH AT	D70A	532.	12.17	59.	20.	7.	.27
+	DIVERSION TO	RD70A	532.	12.17	49.	14.	5.	.27
+	HYDROGRAPH AT	DD70AR	104.	12.42	19.	6.	2.	.27
+	ROUTED TO	D70A70	44.	13.58	18.	6.	2.	.27
+	4 COMBINED AT	CPD70	457.	15.33	277.	128.	48.	13.76
+	ROUTED TO	SRD70	186.	19.75	181.	117.	45.	13.76
+	ROUTED TO	D70D71	186.	19.75	181.	116.	45.	13.76
+	HYDROGRAPH AT	D71	473.	12.17	50.	17.	6.	.24
+	DIVERSION TO	RD71	473.	12.17	40.	11.	4.	.24
+	HYDROGRAPH AT	DD71RE	158.	12.33	18.	6.	2.	.24
+	2 COMBINED AT	CPD71	191.	19.83	185.	118.	46.	14.00
+	ROUTED TO	D71D72	191.	19.83	185.	118.	46.	14.00
+	HYDROGRAPH AT	D59	1581.	12.25	218.	75.	25.	.99
+	DIVERSION TO	RD59	1581.	12.25	188.	53.	18.	.99
+	HYDROGRAPH AT	DD59RE	280.	12.75	66.	22.	7.	.99
+	HYDROGRAPH AT	DD47SE	65.	14.25	22.	8.	3.	3.99
+	ROUTED TO	D47D59	62.	14.67	22.	8.	3.	3.99
	2 COMBINED AT							

+	CPD59	279.	12.75	84.	30.	10.	4.99
+ DIVERSION TO	DD59S	264.	12.75	80.	28.	9.	4.99
+ HYDROGRAPH AT	DD59SE	14.	12.75	4.	2.	1.	4.99
+ ROUTED TO	D59D61	9.	13.33	4.	2.	1.	4.99
+ HYDROGRAPH AT	D61	571.	12.25	78.	27.	9.	.35
+ DIVERSION TO	RD61	571.	12.25	67.	19.	6.	.35
+ HYDROGRAPH AT	DD61RE	95.	12.75	24.	8.	3.	.35
+ 2 COMBINED AT	CPD61	87.	12.75	27.	9.	3.	5.34
+ ROUTED TO	D6172A	76.	12.83	26.	9.	3.	5.34
+ HYDROGRAPH AT	D71A	474.	12.17	53.	18.	6.	.24
+ DIVERSION TO	RD71A	474.	12.17	46.	13.	4.	.24
+ HYDROGRAPH AT	DD71AR	53.	12.58	15.	5.	2.	.24
+ HYDROGRAPH AT	DD59SE	264.	12.75	80.	28.	9.	4.99
+ ROUTED TO	D5971A	180.	13.17	77.	28.	9.	4.99
+ 2 COMBINED AT	CPD71A	202.	13.17	89.	33.	11.	5.22
+ ROUTED TO	71A72A	192.	13.33	89.	33.	11.	5.22
+ HYDROGRAPH AT	D72A	508.	12.17	56.	19.	6.	.25
+ DIVERSION TO	RD72A	508.	12.17	50.	14.	5.	.25
+ HYDROGRAPH AT	DD72AR	54.	12.58	16.	5.	2.	.25
+ 3 COMBINED AT	CPD72A	257.	13.42	127.	47.	16.	5.83
+ ROUTED TO	D72A72	253.	13.42	127.	47.	16.	5.83
+ HYDROGRAPH AT	D72	524.	12.17	57.	19.	6.	.26
+ DIVERSION TO	RD72	524.	12.17	48.	13.	4.	.26
+ HYDROGRAPH AT	DD72RE	93.	12.42	18.	6.	2.	.26
+ 3 COMBINED AT	CPD72	258.	18.00	245.	158.	61.	20.09
+ ROUTED TO	D72D73	239.	18.08	230.	149.	57.	20,09
+ HYDROGRAPH AT	D73	447.	12.25	52.	17.	6.	.28
+ DIVERSION TO	RD73	447.	12.25	44.	12.	4.	.28
+ HYDROGRAPH AT	DD73RE	89.	12.58	16.	5.	2.	.28
+ 2 COMBINED AT	CPD73	243.	18.00	234.	152.	58.	20.37
+ ROUTED TO	D73D78	242.	18.17	233.	152.	58.	20.37
+ HYDROGRAPH AT	B02	673.	12.33	86.	27.	9.	.54
+ DIVERSION TO	RB02	492.	12.17	36.	10.	3.	.54
+ HYDROGRAPH AT	DB02RE	673.	12.33	60.	17.	6.	.54
+ DIVERSION TO	DB02LR	0.	.00	0.	0.	0.	.54
+ HYDROGRAPH AT	DB02SD	673.	12.33	60.	17.	6.	.54
+ HYDROGRAPH AT	B04	641.	12.08	49.	15.	5.	.31
+ DIVERSION TO	RB04	537.	12.00	25.	7.	2.	.31
+ HYDROGRAPH AT	DB04RE	598.	12.08	29.	8.	3.	.31
+ ROUTED TO	B04B02	205.	12.58	28.	8.	3.	.31
HYDROGRAPH AT							

+		DB02SD	0.	.00	0.	0.	0.	.54
+	2 COMBINED AT	CPB02	205.	12.58	28.	8.	3.	.86
+	DIVERSION TO	LR02LR	0.	.00	0.	0.	0.	.86
+	HYDROGRAPH AT	LR02SD	202.	12.58	28.	8.	3.	.86
+	ROUTED TO	LR2D78	110.	12.92	28.	8.	3.	.86
+	HYDROGRAPH AT	D78B	681.	12.42	115.	39.	13.	.53
+	DIVERSION TO	RD78B	681.	12.42	101.	28.	9.	.53
+	HYDROGRAPH AT	DD78BR	144.	13.00	33.	11.	4.	.53
+	5 COMBINED AT	CPD78B	747.	12.33	404.	271.	101.	32.08
+	ROUTED TO	78B79B	485.	12.50	310.	215.	81.	32.08
+	HYDROGRAPH AT	D51	474.	12.25	46.	13.	4.	.29
+	DIVERSION TO	RD51	197.	12.00	10.	3.	1.	.29
+	HYDROGRAPH AT	DD51RE	474.	12.25	38.	10.	3.	.29
+	ROUTED TO	D51D65	243.	13.08	37.	10.	3.	.29
+	HYDROGRAPH AT	D65	1109.	12.17	116.	37.	12.	.69
+	DIVERSION TO	RD65	1109.	12.17	116.	36.	12.	.69
+	HYDROGRAPH AT	DD65RE	8.	21.00	5.	1.	0.	.69
+	2 COMBINED AT	CPD65	243.	13.08	37.	11.	4.	.98
+	ROUTED TO	D65D75	187.	13.58	36.	11.	4.	.98
+	HYDROGRAPH AT	D79A	340.	12.17	36.	12.	4.	.17
+	DIVERSION TO	RD79A	340.	12.17	34.	10.	3.	.17
+	HYDROGRAPH AT	DD79AR	17.	13.33	7.	3.	1.	.17
+	HYDROGRAPH AT	D75	1302.	12.25	150.	49.	16.	.88
+	DIVERSION TO	RD75	1302.	12.25	129.	35.	12.	.88
+	HYDROGRAPH AT	DD75RE	256.	12.58	41.	13.	4.	.88
+	3 COMBINED AT	CPD75	254.	13.58	83.	27.	9.	2.04
+	ROUTED TO	SRD75	103.	14.42	70.	27.	9.	2.04
+	ROUTED TO	D7579B	102.	14.83	70.	27.	9.	2.04
+	HYDROGRAPH AT	D79B	538.	12.17	64.	21.	7.	.32
+	DIVERSION TO	RD79B	538.	12.17	51.	14.	5.	.32
+	HYDROGRAPH AT	DD79BR	203.	12.42	23.	7.	2.	.32
+	3 COMBINED AT	CPD79B	491.	12.58	341.	234.	87.	34.44
+	ROUTED TO	D79B80	499.	12.58	341.	234.	87.	34.44
+	HYDROGRAPH AT	D80	257.	12.08	22.	7.	2.	.13
+	DIVERSION TO	RD80	257.	12.08	17.	5.	2.	.13
+	HYDROGRAPH AT	DD80RE	124.	12.25	8.	3.	1.	.13
+	2 COMBINED AT	CPD80	514.	12.58	343.	236.	87.	34.57
+	HYDROGRAPH AT	B01	194.	12.08	16.	5.	2.	.10
+	3 COMBINED AT	DUMMY	8751.	12.58	1943.	705.	254.	69.06
+	HYDROGRAPH AT	B03	581.	12.17	61.	20.	7.	.34
	DIVERSION TO							

+	RB03	581.	12.17	56.	15.	5.	.34
+ HYDROGRAPH AT	DB03RE	40.	12.83	13.	5.	2.	.34
+ ROUTED TO	B03B05	33.	13.25	13.	5.	2.	.34
+ HYDROGRAPH AT	B05	610.	12.25	74.	25.	8.	.40
+ DIVERSION TO	RB05	588.	12.25	47.	13.	4.	.40
+ HYDROGRAPH AT	DB05RE	539.	12.33	38.	11.	4.	.40
+ 2 COMBINED AT	CPB05	537.	12.33	50.	16.	5.	.73
+ ROUTED TO	B05B06	281.	12.58	48.	16.	5.	.73
+ HYDROGRAPH AT	B06	622.	12.17	64.	20.	7.	.40
+ DIVERSION TO	RB06	135.	11.92	16.	5.	2.	.40
+ HYDROGRAPH AT	DB06RE	622.	12.17	56.	15.	5.	.40
+ 2 COMBINED AT	CPB06	620.	12.17	102.	31.	10.	1.13
+ ROUTED TO	B06B15	423.	12.67	100.	31.	10.	1.13
+ HYDROGRAPH AT	B07	309.	12.33	32.	9.	3.	.25
+ DIVERSION TO	RB07	309.	12.33	32.	9.	3.	.25
+ HYDROGRAPH AT	DB07RE	0.	.00	0.	0.	0.	.25
+ ROUTED TO	B07B09	0.	.00	0.	0.	0.	.25
+ HYDROGRAPH AT	B08	500.	12.08	43.	14.	5.	.23
+ DIVERSION TO	RB08	500.	12.08	43.	13.	4.	.23
+ HYDROGRAPH AT	DB08RE	7.	15.92	5.	2.	1.	.23
+ ROUTED TO	B08B09	7.	16.58	5.	2.	1.	.23
+ HYDROGRAPH AT	B09	769.	12.17	65.	20.	7.	.43
+ DIVERSION TO	RB09	699.	12.08	36.	10.	3.	.43
+ HYDROGRAPH AT	DB09RE	616.	12.25	35.	10.	3.	.43
+ 3 COMBINED AT	CPB09	614.	12.25	37.	11.	4.	.91
+ ROUTED TO	SRB11	19.	13.42	17.	11.	4.	.91
+ ROUTED TO	B09B11	19.	14.33	17.	11.	4.	.91
+ HYDROGRAPH AT	B10	307.	12.08	27.	9.	3.	.16
+ DIVERSION TO	RB10	307.	12.08	27.	8.	3.	.16
+ HYDROGRAPH AT	DB10RE	3.	18.00	2.	1.	0.	.16
+ ROUTED TO	B1011A	3.	18.58	2.	1.	0.	.16
+ ROUTED TO	B1011B	3.	20.42	2.	1.	0.	.16
+ HYDROGRAPH AT	B11	1163.	12.25	119.	36.	12.	.82
+ DIVERSION TO	RB11	42.	11.42	16.	6.	2.	.82
+ HYDROGRAPH AT	DB11RE	1163.	12.25	114.	31.	10.	.82
+ 3 COMBINED AT	CPB11	1160.	12.25	126.	42.	14.	1.89
+ ROUTED TO	B11B12	971.	12.33	124.	42.	14.	1.89
+ HYDROGRAPH AT	B12	415.	12.33	45.	13.	4.	.38
+ DIVERSION TO	RB12	4.	9.58	3.	1.	0.	.38
+ HYDROGRAPH AT	DB12RE	415.	12.33	45.	12.	4.	.38
2 COMBINED AT							

+	CPB12	1383.	12.33	166.	53.	18.	2.27
+ ROUTED TO	B12B14	1349.	12.42	166.	53.	18.	2.27
+ HYDROGRAPH AT	B13	618.	12.25	58.	16.	5.	.49
+ DIVERSION TO	RB13	618.	12.25	45.	12.	4.	.49
+ HYDROGRAPH AT	DB13RE	287.	12.50	17.	5.	2.	.49
+ ROUTED TO	B13B14	129.	12.83	16.	5.	2.	.49
+ HYDROGRAPH AT	B14	456.	12.25	49.	15.	5.	.33
+ DIVERSION TO	RB14	456.	12.25	46.	12.	4.	.33
+ HYDROGRAPH AT	DB14RE	27.	12.92	8.	3.	1.	.33
+ 3 COMBINED AT	CPB14	1349.	12.42	189.	60.	21.	3.09
+ ROUTED TO	B14B15	1157.	12.50	186.	60.	21.	3.09
+ HYDROGRAPH AT	B15	557.	12.25	66.	22.	7.	.38
+ 3 COMBINED AT	CPB15	1707.	12.50	343.	110.	38.	4.60
+ HYDROGRAPH AT	B16	207.	12.08	18.	6.	2.	.11
+ DIVERSION TO	RB16	207.	12.08	12.	3.	1.	.11
+ HYDROGRAPH AT	DB16RE	112.	12.25	7.	2.	1.	.11
+ ROUTED TO	B16B17	37.	12.33	7.	2.	1.	.11
+ HYDROGRAPH AT	B17	532.	12.25	59.	19.	6.	.33
+ DIVERSION TO	RB17	504.	12.17	33.	9.	3.	.33
+ HYDROGRAPH AT	DB17RE	532.	12.25	34.	10.	3.	.33
+ 2 COMBINED AT	CPB17	552.	12.25	41.	12.	4.	.45
+ ROUTED TO	B17B18	429.	12.42	41.	12.	4.	.45
+ HYDROGRAPH AT	B18	392.	12.25	43.	13.	4.	.28
+ DIVERSION TO	RB18	392.	12.25	38.	10.	3.	.28
+ HYDROGRAPH AT	DB18RE	46.	12.75	9.	3.	1.	.28
+ 2 COMBINED AT	CPB18	429.	12.42	50.	15.	5.	.73
+ ROUTED TO	B18B19	280.	12.58	48.	15.	5.	.73
+ HYDROGRAPH AT	B19	239.	12.08	21.	7.	2.	.12
+ 2 COMBINED AT	CPB19	296.	12.58	66.	22.	7.	.85
+ HYDROGRAPH AT	B20	416.	12.17	40.	13.	4.	.23
+ 4 COMBINED AT	DUMMY	10093.	12.58	2228.	793.	285.	74.73
+ HYDROGRAPH AT	B21	337.	12.25	38.	12.	4.	.24
+ DIVERSION TO	RB21	337.	12.25	38.	11.	4.	.24
+ HYDROGRAPH AT	DB21RE	4.	17.25	3.	1.	0.	.24
+ ROUTED TO	B21B22	4.	17.75	3.	1.	0.	.24
+ HYDROGRAPH AT	B22	397.	12.17	39.	13.	4.	.22
+ DIVERSION TO	RB22	4.	4.33	3.	1.	0.	.22
+ HYDROGRAPH AT	DB22RE	397.	12.17	39.	12.	4.	.22
+ 2 COMBINED AT	CPB22	396.	12.17	38.	13.	4.	.46
+ HYDROGRAPH AT	B23	362.	12.33	44.	13.	4.	.27
DIVERSION TO							

+	RB23	4.	8.42	3.	1.	0.	.27
+ HYDROGRAPH AT	DB23RE	362.	12.33	44.	12.	4.	.27
+ ROUTED TO	B23B24	341.	12.42	44.	12.	4.	.27
+ HYDROGRAPH AT	B24	290.	12.17	28.	9.	3.	.19
+ DIVERSION TO	RB24	290.	12.17	23.	6.	2.	.19
+ HYDROGRAPH AT	DB24RE	77.	12.42	8.	3.	1.	.19
+ 2 COMBINED AT	CPB24	414.	12.42	51.	15.	5.	.46
+ ROUTED TO	B24B25	331.	12.67	51.	15.	5.	.46
+ HYDROGRAPH AT	B25	346.	12.17	31.	10.	3.	.20
+ DIVERSION TO	RB25	306.	12.08	19.	5.	2.	.20
+ HYDROGRAPH AT	DB25RE	288.	12.25	16.	5.	2.	.20
+ 2 COMBINED AT	CPB25	361.	12.25	66.	20.	7.	.66
+ HYDROGRAPH AT	B26	487.	12.17	48.	15.	5.	.31
+ DIVERSION TO	RB26	487.	12.17	32.	9.	3.	.31
+ HYDROGRAPH AT	DB26RE	340.	12.33	22.	6.	2.	.31
+ ROUTED TO	B26B27	124.	12.92	21.	6.	2.	.31
+ HYDROGRAPH AT	B27	534.	12.25	65.	21.	7.	.36
+ 2 COMBINED AT	CPB27	533.	12.25	84.	28.	9.	.67
+ 4 COMBINED AT	DUMMY	10504.	12.58	2364.	836.	299.	76.53
+ HYDROGRAPH AT	B76	421.	12.33	46.	14.	5.	.39
+ DIVERSION TO	RB76	421.	12.33	46.	14.	5.	.39
+ HYDROGRAPH AT	DB76RE	0.	.00	0.	0.	0.	.39
+ ROUTED TO	B7676A	0.	.00	0.	0.	0.	.39
+ HYDROGRAPH AT	B75	554.	12.25	49.	14.	5.	.42
+ DIVERSION TO	RB75	554.	12.25	49.	14.	5.	.42
+ HYDROGRAPH AT	DB75RE	0.	.00	0.	0.	0.	.42
+ ROUTED TO	B75A75	0.	.00	0.	0.	0.	.42
+ HYDROGRAPH AT	B75A	414.	12.25	43.	13.	4.	.28
+ 2 COMBINED AT	CPB75A	413.	12.25	43.	13.	4.	.70
+ ROUTED TO	B7576A	379.	12.33	42.	13.	4.	.70
+ HYDROGRAPH AT	B76A	528.	12.17	46.	15.	5.	.31
+ 3 COMBINED AT	CPB76A	773.	12.17	88.	27.	9.	1.40
+ ROUTED TO	B76A78	773.	12.17	88.	27.	9.	1.40
+ HYDROGRAPH AT	B77	1206.	12.33	137.	40.	13.	.83
+ DIVERSION TO	RB77	1035.	12.17	58.	16.	5.	.83
+ HYDROGRAPH AT	DB77RE	1206.	12.33	89.	24.	8.	.83
+ ROUTED TO	B77B78	621.	13.00	86.	24.	8.	.83
+ HYDROGRAPH AT	B78	595.	12.58	102.	32.	11.	.57
+ DIVERSION TO	RB78	510.	12.42	48.	14.	5.	.57
+ HYDROGRAPH AT	DB78RE	595.	12.58	66.	19.	6.	.57
2 COMBINED AT							

+		CPB78A	886.	12.92	152.	43.	14.	1.40
+	DIVERSION TO	RB78BN	681.	12.75	37.	9.	3.	1.40
+	HYDROGRAPH AT	DB78BN	886.	12.92	116.	33.	11.	1.40
+	2 COMBINED AT	CPB78B	960.	12.92	196.	60.	20.	2.80
+	ROUTED TO	B78B79	659.	13.58	194.	60.	20.	2.80
+	HYDROGRAPH AT	B79	1097.	12.33	133.	41.	14.	.85
+	DIVERSION TO	RB79	1045.	12.25	71.	20.	7.	.85
+	HYDROGRAPH AT	DB79RE	1014.	12.42	77.	21.	7.	.85
+	2 COMBINED AT	CPB79	1058.	12.42	270.	81.	27.	3.64
+	ROUTED TO	B79B80	883.	12.50	269.	81.	27.	3.64
+	HYDROGRAPH AT	B80	363.	12.25	39.	12.	4.	.27
+	DIVERSION TO	RB80	363.	12.25	39.	11.	4.	.27
+	HYDROGRAPH AT	DB80RE	5.	15.33	4.	1.	0.	.27
+	2 COMBINED AT	CPB80	883.	12.50	271.	82.	28.	3.91
+	ROUTED TO	SRB80	799.	12.67	270.	82.	28.	3.91
+	ROUTED TO	B80B81	690.	13.00	268.	82.	28.	3.91
+	HYDROGRAPH AT	B81	394.	12.25	40.	12.	4.	.25
+	DIVERSION TO	RB81	7.	10.75	3.	1.	0.	.25
+	HYDROGRAPH AT	DB81RE	394.	12.25	40.	11.	4.	.25
+	2 COMBINED AT	CPB81	708.	12.92	300.	92.	31.	4.16
+	ROUTED TO	SRB81	652.	13.17	299.	92.	31.	4.16
+	ROUTED TO	B81B84	645.	13.25	299.	92.	31.	4.16
+	HYDROGRAPH AT	B82	220.	12.25	22.	7.	2.	.15
+	DIVERSION TO	RB82	220.	12.25	21.	6.	2.	.15
+	HYDROGRAPH AT	DB82RE	7.	13.33	3.	1.	0.	.15
+	ROUTED TO	B82B83	7.	13.58	3.	1.	0.	.15
+	HYDROGRAPH AT	B83	477.	12.08	45.	15.	5.	.22
+	DIVERSION TO	RB83	18.	10.83	8.	3.	1.	.22
+	HYDROGRAPH AT	DB83RE	477.	12.08	43.	12.	4.	.22
+	2 COMBINED AT	CPB83	476.	12.08	45.	13.	4.	.37
+	ROUTED TO	SRB83	28.	12.83	25.	13.	4.	.37
+	ROUTED TO	B83B84	28.	13.00	25.	13.	4.	.37
+	HYDROGRAPH AT	B71	1005.	12.42	140.	44.	15.	.96
+	DIVERSION TO	RB71	1005.	12.42	136.	37.	12.	.96
+	HYDROGRAPH AT	DB71RE	39.	13.92	18.	7.	2.	.96
+	ROUTED TO	B71B72	27.	16.42	17.	7.	2.	.96
+	HYDROGRAPH AT	B72	1241.	12.42	166.	51.	17.	1.12
+	DIVERSION TO	RB72	1187.	12.33	90.	25.	8.	1.12
+	HYDROGRAPH AT	DB72RE	1148.	12.50	94.	26.	9.	1.12
+	2 COMBINED AT	CPB72	1146.	12.50	102.	33.	11.	2.08
	ROUTED TO							

+	B72B74	962.	12.58	101.	33.	11.	2.08
+ HYDROGRAPH AT	B73	530.	12.17	55.	18.	6.	.30
+ DIVERSION TO	RB73	530.	12.17	45.	13.	4.	.30
+ HYDROGRAPH AT	DB73RE	160.	12.42	18.	6.	2.	.30
+ ROUTED TO	SRB73	5.	20.00	5.	4.	2.	.30
+ ROUTED TO	B73B74	5.	21.08	5.	4.	2.	.30
+ HYDROGRAPH AT	B74	216.	12.08	22.	7.	2.	.11
+ DIVERSION TO	RB74	67.	11.83	8.	2.	1.	.11
+ HYDROGRAPH AT	DB74RE	216.	12.08	17.	5.	2.	.11
+ 3 COMBINED AT	CPB74	980.	12.58	118.	41.	14.	2.49
+ ROUTED TO	SRB74	94.	13.50	64.	35.	13.	2.49
+ ROUTED TO	B74B84	93.	13.58	64.	35.	13.	2.49
+ HYDROGRAPH AT	B84	413.	12.17	43.	14.	5.	.22
+ DIVERSION TO	RB84	5.	6.75	4.	1.	0.	.22
+ HYDROGRAPH AT	DB84RE	413.	12.17	43.	13.	4.	.22
+ 4 COMBINED AT	CPB84	742.	13.33	400.	144.	50.	7.24
+ ROUTED TO	SRB84	372.	15.25	301.	133.	48.	7.24
+ HYDROGRAPH AT	B28	1073.	12.42	144.	45.	15.	.96
+ DIVERSION TO	RB28	9.	1.08	1.	0.	0.	.96
+ HYDROGRAPH AT	DB28RE	1073.	12.42	144.	45.	15.	.96
+ HYDROGRAPH AT	B29	302.	12.17	38.	13.	4.	.18
+ DIVERSION TO	RB29	302.	12.17	28.	8.	3.	.18
+ HYDROGRAPH AT	DB29RE	154.	12.42	15.	5.	2.	.18
+ HYDROGRAPH AT	B30	322.	12.17	39.	13.	4.	.17
+ DIVERSION TO	RB30	276.	12.08	22.	6.	2.	.17
+ HYDROGRAPH AT	DB30RE	297.	12.25	23.	7.	2.	.17
+ ROUTED TO	SRB30	31.	12.83	22.	7.	2.	.17
+ HYDROGRAPH AT	B31	1013.	12.25	110.	35.	12.	.68
+ DIVERSION TO	RB31	712.	12.08	46.	14.	5.	.68
+ HYDROGRAPH AT	DB31RE	1013.	12.25	77.	22.	7.	.68
+ ROUTED TO	SRB31	42.	13.42	38.	21.	7.	.68
+ 2 COMBINED AT	DUMMY	72.	13.08	60.	28.	9.	.85
+ 5 COMBINED AT	DUMMY	11197.	12.50	2667.	972.	349.	85.75
+ HYDROGRAPH AT	B32	961.	12.33	127.	40.	13.	.82
+ DIVERSION TO	RB32	961.	12.33	90.	25.	8.	.82
+ HYDROGRAPH AT	DB32RE	598.	12.58	51.	15.	5.	.82
+ ROUTED TO	SRB32	0.	.00	0.	0.	0.	.82
+ ROUTED TO	B32B33	0.	.00	0.	0.	0.	.82
+ HYDROGRAPH AT	B33	579.	12.08	51.	17.	6.	.28
+ DIVERSION TO	RB33	579.	12.08	51.	16.	5.	.28
HYDROGRAPH AT							

+		DB33RE	4.	20.83	3.	1.	0.	.28
+	2 COMBINED AT	CPB33	4.	20.83	3.	1.	0.	1.10
+	HYDROGRAPH AT	B34	251.	12.08	20.	6.	2.	.13
+	DIVERSION TO	RB34	12.	11.50	4.	1.	0.	.13
+	HYDROGRAPH AT	DB34RE	251.	12.08	18.	5.	2.	.13
+	HYDROGRAPH AT	B38	626.	12.17	60.	20.	7.	.34
+	DIVERSION TO	RB38	626.	12.17	60.	20.	7.	.34
+	HYDROGRAPH AT	DB38RE	1.	22.42	0.	0.	0.	.34
+	ROUTED TO	B38B39	1.	24.67	0.	0.	0.	.34
+	HYDROGRAPH AT	B37	838.	12.17	86.	28.	9.	.47
+	DIVERSION TO	RB37	838.	12.17	86.	28.	9.	.47
+	HYDROGRAPH AT	DB37RE	0.	.00	0.	0.	0.	.47
+	ROUTED TO	B37B39	0.	.00	0.	0.	0.	.47
+	HYDROGRAPH AT	B39	1181.	12.25	130.	42.	14.	.77
+	DIVERSION TO	RB39	1181.	12.25	130.	41.	14.	.77
+	HYDROGRAPH AT	DB39RE	9.	23.58	2.	1.	0.	.77
+	3 COMBINED AT	CPB39	10.	23.83	2.	0.	0.	1.58
+	ROUTED TO	SRB39	0.	.00	0.	0.	0.	1.58
+	HYDROGRAPH AT	B35	232.	12.17	18.	5.	2.	.14
+	DIVERSION TO	RB35	1.	4.67	1.	0.	0.	.14
+	HYDROGRAPH AT	DB35RE	232.	12.17	18.	5.	2.	.14
+	HYDROGRAPH AT	B36	123.	12.08	8.	2.	1.	.06
+	DIVERSION TO	RB36	26.	11.75	1.	0.	0.	.06
+	HYDROGRAPH AT	DB36RE	123.	12.08	7.	2.	1.	.06
+	4 COMBINED AT	DUMMY	583.	12.08	42.	12.	4.	1.91
+	3 COMBINED AT	DUMMY	11197.	12.50	2690.	977.	350.	88.76
+	HYDROGRAPH AT	B40	854.	12.17	105.	36.	12.	.51
+	DIVERSION TO	RB40	854.	12.17	66.	19.	6.	.51
+	HYDROGRAPH AT	DB40RE	681.	12.33	56.	17.	6.	.51
+	HYDROGRAPH AT	DD681	105.	12.33	15.	5.	2.	.25
+	ROUTED TO	D68B40	52.	12.67	15.	5.	2.	.25
+	2 COMBINED AT	CPB40	681.	12.33	70.	21.	7.	.77
+	DIVERSION TO	DB401S	429.	12.33	40.	12.	4.	.77
+	HYDROGRAPH AT	DB401	251.	12.33	30.	9.	3.	.77
+	DIVERSION TO	DB402S	79.	12.33	13.	4.	1.	.77
+	HYDROGRAPH AT	DB402	172.	12.33	17.	5.	2.	.77
+	ROUTED TO	B40B41	90.	12.67	17.	5.	2.	.77
+	HYDROGRAPH AT	B41	995.	12.42	144.	45.	15.	.95
+	DIVERSION TO	RB41	892.	12.33	75.	21.	7.	.95
+	HYDROGRAPH AT	DB41RE	992.	12.50	85.	24.	8.	.95
	HYDROGRAPH AT							

+	DD682	9.	12.33	1.	0.	0.	.25
+ ROUTED TO	D68B41	3.	14.25	1.	0.	0.	.25
+ HYDROGRAPH AT	DD691	2.	13.50	1.	0.	0.	.71
+ ROUTED TO	D69B41	2.	15.08	1.	0.	0.	.71
+ 4 COMBINED AT	CPB41	1042.	12.50	103.	30.	10.	2.18
+ DIVERSION TO	DB41S	987.	12.50	98.	28.	9.	2.18
+ HYDROGRAPH AT	DB41SE	55.	12.50	5.	1.	0.	2.18
+ ROUTED TO	B41B43	43.	12.67	5.	1.	0.	2.18
+ HYDROGRAPH AT	B43	701.	12.42	118.	40.	14.	.54
+ DIVERSION TO	RB43	701.	12.42	101.	28.	9.	.54
+ HYDROGRAPH AT	DB43RE	189.	12.92	37.	12.	4.	.54
+ HYDROGRAPH AT	DD692	2.	13.50	1.	0.	0.	.71
+ ROUTED TO	D69B43	1.	16.25	1.	0.	0.	.71
+ 3 COMBINED AT	CPB43	215.	12.92	41.	14.	5.	2.72
+ ROUTED TO	B43B45	135.	13.50	40.	14.	5.	2.72
+ HYDROGRAPH AT	B44	866.	12.17	107.	36.	12.	.52
+ DIVERSION TO	RB44	866.	12.17	88.	25.	8.	.52
+ HYDROGRAPH AT	DB44RE	223.	12.50	35.	11.	4.	.52
+ HYDROGRAPH AT	DB401	429.	12.33	40.	12.	4.	.77
+ ROUTED TO	B40B44	159.	13.25	40.	12.	4.	.77
+ 2 COMBINED AT	CPB44	223.	12.50	74.	23.	8.	1.29
+ DIVERSION TO	DB441S	27.	12.50	9.	3.	1.	1.29
+ HYDROGRAPH AT	DB441	194.	12.50	65.	21.	7.	1.29
+ DIVERSION TO	DB442S	17.	12.50	6.	2.	1.	1.29
+ HYDROGRAPH AT	DB442	177.	12.50	59.	19.	6.	1.29
+ ROUTED TO	B44B45	167.	13.42	58.	19.	6.	1.29
+ HYDROGRAPH AT	B45	1129.	12.33	157.	53.	18.	.81
+ DIVERSION TO	RB45	1129.	12.33	113.	32.	11.	.81
+ HYDROGRAPH AT	DB45RE	744.	12.50	67.	21.	7.	.81
+ HYDROGRAPH AT	DB402	79.	12.33	13.	4.	1.	.77
+ ROUTED TO	B40B45	46.	12.83	12.	4.	1.	.77
+ HYDROGRAPH AT	DB41SE	987.	12.50	98.	28.	9.	2.18
+ ROUTED TO	B41B45	555.	13.17	93.	28.	9.	2.18
+ 5 COMBINED AT	CPB45	855.	13.17	265.	85.	28.	4.05
+ ROUTED TO	B45B47	764.	13.75	256.	85.	28.	4.05
+ HYDROGRAPH AT	L01	268.	12.17	25.	8.	3.	.16
+ DIVERSION TO	RL01	268.	12.17	18.	5.	2.	.16
+ HYDROGRAPH AT	DL01RE	157.	12.33	9.	3.	1.	.16
+ ROUTED TO	L01L03	58.	12.75	8.	3.	1.	.16
+ HYDROGRAPH AT	L03	958.	12.33	116.	35.	12.	.79
DIVERSION TO							

+		RL03	958.	12.33	116.	34.	11.	.79
+	HYDROGRAPH AT	DL03RE	1.	19.83	1.	0.	0.	.79
+	HYDROGRAPH AT	L20	390.	12.42	47.	14.	5.	.35
+	DIVERSION TO	RL20	390.	12.42	41.	11.	4.	.35
+	HYDROGRAPH AT	DL20RE	88.	12.83	9.	3.	1.	.35
+	ROUTED TO	L20L03	46.	13.25	9.	3.	1.	.35
+	3 COMBINED AT	CPL03	60.	13.25	17.	5.	2.	1.29
+	DIVERSION TO	DL03S	37.	12.67	15.	5.	2.	1.29
+	HYDROGRAPH AT	DL03SE	23.	13.25	2.	0.	0.	1.29
+	ROUTED TO	L03L04	18.	13.58	2.	0.	0.	1.29
+	HYDROGRAPH AT	L04	663.	12.42	82.	24.	8.	.63
+	DIVERSION TO	RL04	663.	12.42	81.	22.	7.	.63
+	HYDROGRAPH AT	DL04RE	8.	15.67	6.	2.	1.	.63
+	2 COMBINED AT	CPL04	17.	13.58	6.	2.	1.	1.93
+	DIVERSION TO	DL04S	0.	.00	0.	0.	0.	1.93
+	HYDROGRAPH AT	DL04SE	17.	13.58	6.	2.	1.	1.93
+	ROUTED TO	L04L05	6.	17.25	5.	2.	1.	1.93
+	HYDROGRAPH AT	L02	1737.	12.58	279.	85.	28.	1.88
+	DIVERSION TO	RL02	1737.	12.58	219.	59.	20.	1.88
+	HYDROGRAPH AT	DL02RE	891.	12.92	88.	26.	9.	1.88
+	ROUTED TO	L02L05	584.	13.08	87.	26.	9.	1.88
+	HYDROGRAPH AT	L05	660.	12.33	84.	27.	9.	.49
+	DIVERSION TO	RL05	660.	12.33	61.	17.	6.	.49
+	HYDROGRAPH AT	DL05RE	406.	12.50	33.	10.	3.	.49
+	3 COMBINED AT	CPL05	636.	13.08	121.	38.	13.	4.30
+	ROUTED TO	L05L09	574.	13.17	119.	38.	13.	4.30
+	HYDROGRAPH AT	L09	657.	12.33	85.	27.	9.	.49
+	DIVERSION TO	RL09	657.	12.33	85.	26.	9.	.49
+	HYDROGRAPH AT	DL09RE	6.	20.92	4.	1.	0.	.49
+	2 COMBINED AT	CPL09	574.	13.17	119.	39.	13.	4.78
+	ROUTED TO	L0913B	540.	13.25	118.	39.	13.	4.78
+	DIVERSION TO	DL13BR	314.	13.25	49.	14.	5.	4.78
+	HYDROGRAPH AT	DL13BN	225.	13.25	69.	24.	8.	4.78
+	HYDROGRAPH AT	DL13BN	314.	13.25	49.	14.	5.	4.78
+	ROUTED TO	SRL13B	22.	15.25	21.	14.	5.	4.78
+	2 COMBINED AT	CPL13B	245.	13.25	89.	39.	13.	4.78
+	ROUTED TO	L13B13	244.	13.33	89.	39.	13.	4.78
+	HYDROGRAPH AT	L13	860.	12.17	109.	38.	13.	.48
+	DIVERSION TO	RL13	860.	12.17	91.	26.	9.	.48
+	HYDROGRAPH AT	DL13RE	190.	12.50	36.	12.	4.	.48
	HYDROGRAPH AT							

+		L06	914.	12.33	107.	33.	11.	.70
+	DIVERSION TO	RL06	914.	12.33	107.	33.	11.	.70
+	HYDROGRAPH AT	DL06RE	0.	.00	0.	0.	0.	.70
+	DIVERSION TO	DL06S	0.	.00	0.	0.	0.	.70
+	HYDROGRAPH AT	DL06SE	0.	.00	0.	0.	0.	.70
+	ROUTED TO	L06L07	0.	.00	0.	0.	0.	.70
+	HYDROGRAPH AT	L07	816.	12.33	101.	31.	10.	.63
+	DIVERSION TO	RL07	816.	12.33	101.	31.	10.	.63
+	HYDROGRAPH AT	DL07RE	0.	.00	0.	0.	0.	.63
+	HYDROGRAPH AT	DL03SE	37.	12.67	15.	5.	2.	1.29
+	ROUTED TO	L0307A	37.	13.58	14.	5.	2.	1.29
+	ROUTED TO	L0307B	37.	13.83	14.	5.	2.	1.29
+	3 COMBINED AT	CPL07	37.	13.83	14.	5.	2.	2.62
+	DIVERSION TO	DL07S	7.	13.83	3.	1.	0.	2.62
+	HYDROGRAPH AT	DL07SE	29.	13.83	11.	4.	1.	2.62
+	ROUTED TO	L07L08	29.	14.00	11.	4.	1.	2.62
+	HYDROGRAPH AT	L08	647.	12.33	87.	27.	9.	.49
+	DIVERSION TO	RL08	647.	12.33	86.	23.	8.	.49
+	HYDROGRAPH AT	DL08RE	15.	14.50	8.	3.	1.	.49
+	HYDROGRAPH AT	DL04SE	0.	.00	0.	0.	0.	1.93
+	ROUTED TO	L04L08	0.	.00	0.	0.	0.	1.93
+	3 COMBINED AT	CPL08	36.	14.50	19.	7.	2.	3.74
+	ROUTED TO	L08L12	29.	15.50	18.	7.	2.	3.74
+	HYDROGRAPH AT	L10	845.	12.42	103.	30.	10.	.84
+	DIVERSION TO	RL10	845.	12.42	65.	17.	6.	.84
+	HYDROGRAPH AT	DL10RE	647.	12.58	46.	13.	4.	.84
+	ROUTED TO	L10L11	441.	12.83	45.	13.	4.	.84
+	HYDROGRAPH AT	DL06SE	0.	.00	0.	0.	0.	.70
+	ROUTED TO	L06L11	0.	.00	0.	0.	0.	.70
+	HYDROGRAPH AT	L11	744.	12.33	94.	29.	10.	.62
+	DIVERSION TO	RL11	744.	12.33	89.	24.	8.	.62
+	HYDROGRAPH AT	DL11RE	46.	13.25	15.	5.	2.	.62
+	HYDROGRAPH AT	DL07SE	7.	13.83	3.	1.	0.	2.62
+	ROUTED TO	L07L11	6.	15.25	3.	1.	0.	2.62
+	4 COMBINED AT	CPL11	439.	12.83	61.	19.	6.	4.09
+	DIVERSION TO	DL11S	3.	12.83	0.	0.	0.	4.09
+	HYDROGRAPH AT	DL11SE	434.	12.83	60.	18.	6.	4.09
+	ROUTED TO	L11L12	354.	13.00	60.	18.	6.	4.09
+	HYDROGRAPH AT	L12	586.	12.25	68.	22.	7.	.36
+	DIVERSION TO	RL12	586.	12.25	60.	16.	5.	.36
	HYDROGRAPH AT							

+	DL12RE	90.	12.67	16.	5.	2.	.36
+ 3 COMBINED AT	CPL12	385.	13.00	89.	30.	10.	5.56
+ DIVERSION TO	DL121S	68.	13.00	16.	5.	2.	5.56
+ HYDROGRAPH AT	DL121	318.	13.00	73.	25.	8.	5.56
+ DIVERSION TO	DL122S	4.	13.00	1.	0.	0.	5.56
+ HYDROGRAPH AT	DL122	314.	13.00	72.	24.	8.	5.56
+ ROUTED TO	L12L13	280.	13.08	71.	24.	8.	5.56
+ 3 COMBINED AT	CPL13	502.	13.25	176.	67.	22.	8.90
+ ROUTED TO	L13DS5	493.	13.33	176.	67.	22.	8.90
+ ROUTED TO	DS5L19	485.	13.33	175.	67.	22.	8.90
+ HYDROGRAPH AT	L14	269.	12.25	24.	7.	2.	.23
+ DIVERSION TO	RL14	269.	12.25	24.	7.	2.	.23
+ HYDROGRAPH AT	DL14RE	0.	.00	0.	0.	0.	.23
+ ROUTED TO	L14L15	0.	.00	0.	0.	0.	.23
+ HYDROGRAPH AT	L15	438.	12.25	40.	11.	4.	.37
+ DIVERSION TO	RL15	438.	12.25	40.	11.	4.	.37
+ HYDROGRAPH AT	DL15RE	0.	.00	0.	0.	0.	.37
+ 2 COMBINED AT	CPL15	0.	.00	0.	0.	0.	.60
+ ROUTED TO	L15L16	0.	.00	0.	0.	0.	.60
+ HYDROGRAPH AT	L16	582.	12.33	58.	17.	6.	.50
+ DIVERSION TO	RL16	582.	12.33	58.	17.	6.	.50
+ HYDROGRAPH AT	DL16RE	0.	.00	0.	0.	0.	.50
+ 2 COMBINED AT	CPL16	0.	.00	0.	0.	0.	1.10
+ ROUTED TO	L16L17	0.	.00	0.	0.	0.	1.10
+ HYDROGRAPH AT	L17	586.	12.33	72.	23.	8.	.50
+ DIVERSION TO	RL17	586.	12.33	72.	23.	8.	.50
+ HYDROGRAPH AT	DL17RE	0.	.00	0.	0.	0.	.50
+ 2 COMBINED AT	CPL17	0.	.00	0.	0.	0.	1.61
+ DIVERSION TO	DL17S	0.	.00	0.	0.	0.	1.61
+ HYDROGRAPH AT	DL17SE	0.	.00	0.	0.	0.	1.61
+ ROUTED TO	L17L18	0.	.00	0.	0.	0.	1.61
+ HYDROGRAPH AT	L18	604.	12.25	58.	17.	6.	.50
+ DIVERSION TO	RL18	604.	12.25	58.	17.	6.	.50
+ HYDROGRAPH AT	DL18RE	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DL11SE	3.	12.83	0.	0.	0.	4.09
+ ROUTED TO	L11L18	1.	13.75	0.	0.	0.	4.09
+ HYDROGRAPH AT	DL121	68.	13.00	16.	5.	2.	5.56
+ ROUTED TO	L12L18	48.	13.58	15.	5.	2.	5.56
+ 4 COMBINED AT	CPL18	44.	13.58	14.	5.	2.	7.67
+ DIVERSION TO	DL181S	0.	.00	0.	0.	0.	7.67
HYDROGRAPH AT							

+		DL181	44.	13.58	14.	5.	2.	7.67
+	DIVERSION TO	DL182S	2.	13.58	1.	0.	0.	7.67
+	HYDROGRAPH AT	DL182	42.	13.58	13.	5.	2.	7.67
+	ROUTED TO	L18L19	37.	13.92	13.	5.	2.	7.67
+	HYDROGRAPH AT	L19	877.	12.17	110.	38.	13.	.49
+	DIVERSION TO	RL19	877.	12.17	91.	26.	9.	.49
+	HYDROGRAPH AT	DL19RE	205.	12.50	37.	12.	4.	.49
+	HYDROGRAPH AT	DL122	4.	13.00	1.	0.	0.	5.56
+	ROUTED TO	L12L19	2.	14.25	1.	0.	0.	5.56
+	4 COMBINED AT	CPL19	511.	13.42	207.	79.	26.	11.50
+	ROUTED TO	L19DS7	508.	13.42	207.	79.	26.	11.50
+	ROUTED TO	DS7L27	496.	13.50	206.	79.	26.	11.50
+	HYDROGRAPH AT	L23	922.	12.33	102.	30.	10.	.90
+	DIVERSION TO	RL23	922.	12.33	102.	30.	10.	.90
+	HYDROGRAPH AT	DL23RE	0.	.00	0.	0.	0.	.90
+	ROUTED TO	L23L24	0.	.00	0.	0.	0.	.90
+	HYDROGRAPH AT	L24	624.	12.25	60.	18.	6.	.50
+	DIVERSION TO	RL24	624.	12.25	60.	18.	6.	.50
+	HYDROGRAPH AT	DL24RE	0.	.00	0.	0.	0.	.50
+	2 COMBINED AT	CPL24	0.	.00	0.	0.	0.	1.40
+	ROUTED TO	L24L26	0.	.00	0.	0.	0.	1.40
+	HYDROGRAPH AT	L25	261.	12.33	29.	8.	3.	.24
+	DIVERSION TO	RL25	261.	12.33	29.	8.	3.	.24
+	HYDROGRAPH AT	DL25RE	0.	.00	0.	0.	0.	.24
+	ROUTED TO	L25L26	0.	.00	0.	0.	0.	.24
+	HYDROGRAPH AT	DL181	0.	.00	0.	0.	0.	7.67
+	ROUTED TO	L18L26	0.	.00	0.	0.	0.	7.67
+	HYDROGRAPH AT	DL17SE	0.	.00	0.	0.	0.	1.61
+	ROUTED TO	L17L26	0.	.00	0.	0.	0.	1.61
+	HYDROGRAPH AT	L26	980.	12.25	103.	32.	11.	.76
+	DIVERSION TO	RL26	980.	12.25	103.	29.	10.	.76
+	HYDROGRAPH AT	DL26RE	9.	17.50	7.	2.	1.	.76
+	5 COMBINED AT	CPL26	5.	20.83	3.	1.	0.	10.07
+	DIVERSION TO	DL26S	0.	.00	0.	0.	0.	10.07
+	HYDROGRAPH AT	DL26SE	5.	20.83	3.	1.	0.	10.07
+	ROUTED TO	L26L27	5.	23.00	3.	1.	0.	10.07
+	HYDROGRAPH AT	L27	906.	12.17	113.	39.	13.	.51
+	DIVERSION TO	RL27	906.	12.17	91.	26.	9.	.51
+	HYDROGRAPH AT	DL27RE	250.	12.42	41.	13.	4.	.51
+	HYDROGRAPH AT	DL182	2.	13.58	1.	0.	0.	7.67
	ROUTED TO							

+		L18L27	2.	14.75	1.	0.	0.	7.67
+	4 COMBINED AT	CPL27	518.	13.58	225.	87.	29.	14.41
+	ROUTED TO	L27L34	510.	13.67	224.	87.	29.	14.41
+	DIVERSION TO	DL34BR	58.	13.67	4.	1.	0.	14.41
+	HYDROGRAPH AT	DL34BN	452.	13.67	220.	86.	29.	14.41
+	HYDROGRAPH AT	DL34BN	58.	13.67	4.	1.	0.	14.41
+	ROUTED TO	SRL34B	11.	14.00	4.	1.	0.	14.41
+	2 COMBINED AT	CPL34	458.	13.67	224.	87.	29.	14.41
+	ROUTED TO	L34B34	456.	13.75	224.	87.	29.	14.41
+	HYDROGRAPH AT	L33	627.	12.42	65.	17.	6.	.65
+	DIVERSION TO	RL33	435.	12.25	21.	5.	2.	.65
+	HYDROGRAPH AT	DL33RE	627.	12.42	46.	12.	4.	.65
+	DIVERSION TO	DL33S	1.	12.42	0.	0.	0.	.65
+	HYDROGRAPH AT	DL33SE	625.	12.42	46.	12.	4.	.65
+	ROUTED TO	L33L34	539.	12.58	46.	12.	4.	.65
+	HYDROGRAPH AT	L34	917.	12.17	115.	40.	13.	.51
+	DIVERSION TO	RL34	917.	12.17	97.	27.	9.	.51
+	HYDROGRAPH AT	DL34RE	181.	12.58	38.	12.	4.	.51
+	HYDROGRAPH AT	DL26SE	0.	.00	0.	0.	0.	10.07
+	ROUTED TO	L26L34	0.	.00	0.	0.	0.	10.07
+	4 COMBINED AT	CPL34B	517.	12.58	283.	107.	36.	15.58
+	ROUTED TO	34DS11	514.	12.67	282.	107.	36.	15.58
+	ROUTED TO	DS1139	510.	12.75	282.	107.	36.	15.58
+	HYDROGRAPH AT	L39A	545.	12.08	57.	20.	7.	.26
+	2 COMBINED AT	CPL39A	549.	12.75	311.	123.	42.	15.84
+	DIVERSION TO	DL39BR	63.	12.75	10.	3.	1.	15.84
+	HYDROGRAPH AT	DL39BN	486.	12.75	301.	121.	41.	15.84
+	HYDROGRAPH AT	L28	406.	12.25	42.	13.	4.	.31
+	DIVERSION TO	RL28	406.	12.25	41.	11.	4.	.31
+	HYDROGRAPH AT	DL28RE	12.	13.58	5.	2.	1.	.31
+	ROUTED TO	L28L29	10.	14.33	5.	2.	1.	.31
+	HYDROGRAPH AT	L29	303.	12.33	35.	11.	4.	.25
+	DIVERSION TO	RL29	303.	12.33	35.	10.	3.	.25
+	HYDROGRAPH AT	DL29RE	5.	15.17	3.	1.	0.	.25
+	2 COMBINED AT	CPL29	12.	15.17	8.	3.	1.	.56
+	DIVERSION TO	DL29S	6.	15.17	4.	2.	1.	.56
+	HYDROGRAPH AT	DL29SE	6.	15.17	4.	2.	1.	.56
+	ROUTED TO	L29L36	6.	16.33	4.	2.	1.	.56
+	HYDROGRAPH AT	L35	716.	12.25	77.	24.	8.	.52
+	DIVERSION TO	RL35	716.	12.25	77.	23.	8.	.52
	HYDROGRAPH AT							

+	DL35RE	6.	19.92	4.	1.	0.	.52
+ HYDROGRAPH AT	DL29SE	6.	15.17	4.	2.	1.	.56
+ ROUTED TO	L29L35	5.	17.08	4.	2.	1.	.56
+ 2 COMBINED AT	CPL35	10.	19.92	7.	3.	1.	1.07
+ ROUTED TO	L35L37	8.	21.42	7.	3.	1.	1.07
+ HYDROGRAPH AT	L37	496.	12.25	51.	16.	5.	.40
+ DIVERSION TO	RL37	496.	12.25	49.	13.	4.	.40
+ HYDROGRAPH AT	DL37RE	13.	13.67	6.	2.	1.	.40
+ HYDROGRAPH AT	L36	622.	12.25	68.	22.	7.	.47
+ DIVERSION TO	RL36	622.	12.25	68.	22.	7.	.47
+ HYDROGRAPH AT	DL36RE	0.	.00	0.	0.	0.	.47
+ 4 COMBINED AT	CPL36	14.	17.92	13.	6.	2.	1.94
+ ROUTED TO	L36L38	14.	18.50	13.	6.	2.	1.94
+ HYDROGRAPH AT	L30	703.	12.25	80.	25.	8.	.54
+ DIVERSION TO	RL30	703.	12.25	75.	20.	7.	.54
+ HYDROGRAPH AT	DL30RE	44.	13.00	13.	5.	2.	.54
+ ROUTED TO	L30L31	35.	13.33	13.	5.	2.	.54
+ HYDROGRAPH AT	L31	709.	12.17	64.	20.	7.	.42
+ DIVERSION TO	RL31	709.	12.17	59.	16.	5.	.42
+ HYDROGRAPH AT	DL31RE	50.	12.67	13.	4.	1.	.42
+ 2 COMBINED AT	CPL31	57.	13.33	25.	9.	3.	.96
+ ROUTED TO	L31L32	56.	13.50	25.	9.	3.	.96
+ HYDROGRAPH AT	L32	429.	12.25	33.	9.	3.	.35
+ DIVERSION TO	RL32	429.	12.25	33.	9.	3.	.35
+ HYDROGRAPH AT	DL32RE	0.	.00	0.	0.	0.	.35
+ 2 COMBINED AT	CPL32	56.	13.50	25.	9.	3.	1.31
+ ROUTED TO	L32L38	49.	14.00	24.	9.	3.	1.31
+ HYDROGRAPH AT	L38	1144.	12.33	107.	28.	9.	1.00
+ DIVERSION TO	RL38	1144.	12.33	95.	24.	8.	1.00
+ HYDROGRAPH AT	DL38RE	302.	12.67	15.	4.	1.	1.00
+ HYDROGRAPH AT	DL33SE	1.	12.42	0.	0.	0.	.65
+ ROUTED TO	L33L38	1.	13.50	0.	0.	0.	.65
+ 4 COMBINED AT	CPL38	302.	12.67	45.	19.	6.	4.90
+ ROUTED TO	L38L39	102.	13.17	42.	18.	6.	4.90
+ HYDROGRAPH AT	L39	518.	12.08	55.	19.	6.	.25
+ DIVERSION TO	RL39	518.	12.08	55.	19.	6.	.25
+ HYDROGRAPH AT	DL39RE	0.	.00	0.	0.	0.	.25
+ HYDROGRAPH AT	DL39BN	63.	12.75	10.	3.	1.	15.84
+ 3 COMBINED AT	CPL39B	230.	13.75	73.	29.	10.	20.34
+ ROUTED TO	SRL39B	26.	14.25	20.	11.	4.	20.34
2 COMBINED AT							

+	CPL39	488.	13.83	309.	129.	43.	20.34
+ ROUTED TO	39DS13	482.	13.92	305.	127.	43.	20.34
+ ROUTED TO	DS1344	482.	14.00	305.	127.	43.	20.34
+ HYDROGRAPH AT	L41	272.	12.33	26.	7.	2.	.25
+ DIVERSION TO	DL41S	171.	12.33	18.	5.	2.	.25
+ HYDROGRAPH AT	DL41SE	101.	12.33	8.	2.	1.	.25
+ ROUTED TO	L41L42	85.	12.50	8.	2.	1.	.25
+ HYDROGRAPH AT	L42	584.	12.50	70.	19.	6.	.74
+ 2 COMBINED AT	CPL42	668.	12.50	79.	21.	7.	.99
+ DIVERSION TO	DL421S	344.	12.50	40.	10.	3.	.99
+ HYDROGRAPH AT	DL421	324.	12.50	39.	10.	3.	.99
+ DIVERSION TO	DL422S	69.	12.50	10.	3.	1.	.99
+ HYDROGRAPH AT	DL422	255.	12.50	29.	8.	3.	.99
+ ROUTED TO	L42L43	203.	12.92	29.	8.	3.	.99
+ HYDROGRAPH AT	L43	979.	12.42	97.	25.	8.	1.00
+ DIVERSION TO	RL43	2.	7.33	2.	1.	0.	1.00
+ HYDROGRAPH AT	DL43RE	979.	12.42	97.	25.	8.	1.00
+ 2 COMBINED AT	CPL43	1075.	12.42	126.	33.	11.	1.99
+ DIVERSION TO	DL431S	5.	12.42	0.	0.	0.	1.99
+ HYDROGRAPH AT	DL431	1070.	12.42	125.	32.	11.	1.99
+ DIVERSION TO	DL432S	23.	12.42	2.	1.	0.	1.99
+ HYDROGRAPH AT	DL432	1047.	12.42	123.	32.	11.	1.99
+ ROUTED TO	L43L44	857.	12.58	123.	32.	11.	1.99
+ HYDROGRAPH AT	L44	855.	12.17	106.	37.	12.	.48
+ DIVERSION TO	RL44	855.	12.17	84.	24.	8.	.48
+ HYDROGRAPH AT	DL44RE	304.	12.42	40.	13.	4.	.48
+ 3 COMBINED AT	CPL44	1122.	12.75	430.	161.	54.	22.80
+ ROUTED TO	44DS14	1114.	12.83	429.	161.	54.	22.80
+ ROUTED TO	DS1449	1103.	12.83	429.	161.	54.	22.80
+ HYDROGRAPH AT	L40	675.	12.33	78.	23.	8.	.61
+ DIVERSION TO	RL40	675.	12.33	77.	21.	7.	.61
+ HYDROGRAPH AT	DL40RE	10.	15.08	7.	2.	1.	.61
+ ROUTED TO	L40L45	9.	16.00	6.	2.	1.	.61
+ HYDROGRAPH AT	L45	616.	12.33	65.	19.	6.	.50
+ DIVERSION TO	RL45	616.	12.33	64.	17.	6.	.50
+ HYDROGRAPH AT	DL45RE	11.	14.33	6.	2.	1.	.50
+ 2 COMBINED AT	CPL45	16.	16.00	11.	4.	1.	1.11
+ ROUTED TO	L45L46	15.	16.42	11.	4.	1.	1.11
+ HYDROGRAPH AT	L46	513.	12.33	47.	12.	4.	.49
+ HYDROGRAPH AT	DL41SE	171.	12.33	18.	5.	2.	.25
ROUTED TO							

+	L41L46	135.	12.67	18.	5.	2.	.25
+ 3 COMBINED AT	CPL46	568.	12.33	70.	21.	7.	1.85
+ DIVERSION TO	DL461S	110.	12.33	24.	8.	3.	1.85
+ HYDROGRAPH AT	DL461	458.	12.33	46.	13.	5.	1.85
+ DIVERSION TO	DL462S	50.	12.33	6.	2.	1.	1.85
+ HYDROGRAPH AT	DL462	408.	12.33	41.	12.	4.	1.85
+ ROUTED TO	L46L47	361.	12.50	41.	12.	4.	1.85
+ HYDROGRAPH AT	L47	466.	12.42	47.	12.	4.	.50
+ DIVERSION TO	RL47	331.	12.25	15.	4.	1.	.50
+ HYDROGRAPH AT	DL47RE	466.	12.42	33.	9.	3.	.50
+ HYDROGRAPH AT	DL421	344.	12.50	40.	10.	3.	.99
+ ROUTED TO	L42L47	310.	12.67	40.	10.	3.	.99
+ 3 COMBINED AT	CPL47	1022.	12.50	112.	30.	10.	3.09
+ DIVERSION TO	DL471S	185.	12.33	34.	10.	3.	3.09
+ HYDROGRAPH AT	DL471	837.	12.50	78.	21.	7.	3.09
+ DIVERSION TO	DL472S	713.	12.50	68.	18.	6.	3.09
+ HYDROGRAPH AT	DL472	124.	12.50	10.	3.	1.	3.09
+ ROUTED TO	L47L48	90.	12.83	10.	3.	1.	3.09
+ HYDROGRAPH AT	L48	1032.	12.33	106.	30.	10.	1.00
+ DIVERSION TO	RL48	924.	12.25	52.	14.	5.	1.00
+ HYDROGRAPH AT	DL48RE	1006.	12.42	59.	16.	5.	1.00
+ HYDROGRAPH AT	DL422	69.	12.50	10.	3.	1.	.99
+ ROUTED TO	L42L48	54.	13.08	10.	3.	1.	.99
+ HYDROGRAPH AT	DL431	5.	12.42	0.	0.	0.	1.99
+ ROUTED TO	L43L48	3.	13.08	0.	0.	0.	1.99
+ 4 COMBINED AT	CPL48	1006.	12.42	79.	21.	7.	5.09
+ DIVERSION TO	DL481S	11.	12.42	0.	0.	0.	5.09
+ HYDROGRAPH AT	DL481	990.	12.42	78.	21.	7.	5.09
+ DIVERSION TO	DL482S	15.	12.42	1.	0.	0.	5.09
+ HYDROGRAPH AT	DL482	975.	12.42	77.	20.	7.	5.09
+ ROUTED TO	L48L49	643.	12.67	77.	20.	7.	5.09
+ HYDROGRAPH AT	L49	841.	12.17	106.	37.	12.	.47
+ DIVERSION TO	RL49	841.	12.17	88.	25.	8.	.47
+ HYDROGRAPH AT	DL49RE	208.	12.50	36.	12.	4.	.47
+ HYDROGRAPH AT	DL432	23.	12.42	2.	1.	0.	1.99
+ ROUTED TO	L43L49	12.	13.33	2.	1.	0.	1.99
+ 4 COMBINED AT	CPL49	1530.	12.83	496.	180.	61.	26.38
+ ROUTED TO	49DS15	1445.	13.00	493.	180.	61.	26.38
+ ROUTED TO	DS1554	1421.	13.08	492.	180.	61.	26.38
+ HYDROGRAPH AT	L54	865.	12.17	105.	36.	12.	.48
DIVERSION TO							

+		RL54	865.	12.17	85.	24.	8.	.48
+	HYDROGRAPH AT	DL54RE	238.	12.42	38.	12.	4.	.48
+	HYDROGRAPH AT	DL482	15.	12.42	1.	0.	0.	5.09
+	ROUTED TO	L48L54	5.	13.58	1.	0.	0.	5.09
+	3 COMBINED AT	CPL54	1476.	13.08	516.	188.	63.	26.86
+	ROUTED TO	L54W2E	1481.	13.08	516.	188.	63.	26.86
+	ROUTED TO	W2EB46	1450.	13.17	514.	188.	63.	26.86
+	HYDROGRAPH AT	B46	962.	12.17	121.	41.	14.	.54
+	DIVERSION TO	RB46	962.	12.17	97.	27.	9.	.54
+	HYDROGRAPH AT	DB46RE	274.	12.50	43.	14.	5.	.54
+	HYDROGRAPH AT	DB441	27.	12.50	9.	3.	1.	1.29
+	ROUTED TO	B44B46	25.	13.58	9.	3.	1.	1.29
+	3 COMBINED AT	CPB46	1496.	13.17	540.	197.	66.	28.69
+	ROUTED TO	B46B47	1472.	13.25	538.	197.	66.	28.69
+	HYDROGRAPH AT	B47	851.	12.17	104.	35.	12.	.50
+	DIVERSION TO	RB47	851.	12.17	86.	24.	8.	.50
+	HYDROGRAPH AT	DB47RE	246.	12.50	34.	11.	4.	.50
+	HYDROGRAPH AT	DB442	17.	12.50	6.	2.	1.	1.29
+	ROUTED TO	B44B47	14.	14.00	6.	2.	1.	1.29
+	4 COMBINED AT	CPB47	1555.	13.33	730.	266.	89.	31.95
+	HYDROGRAPH AT	B48	755.	12.17	88.	30.	10.	.40
+	DIVERSION TO	RB48	755.	12.17	75.	21.	7.	.40
+	HYDROGRAPH AT	DB48RE	111.	12.58	27.	9.	3.	.40
+	2 COMBINED AT	CPB48	1586.	13.33	746.	272.	91.	32.34
+	ROUTED TO	SRB48	987.	14.50	712.	272.	91.	32.34
+	ROUTED TO	B48B54	984.	14.83	708.	272.	91.	32.34
+	HYDROGRAPH AT	B42	673.	12.08	49.	15.	5.	.35
+	DIVERSION TO	RB42	4.	4.25	2.	1.	0.	.35
+	HYDROGRAPH AT	DB42RE	673.	12.08	49.	14.	5.	.35
+	ROUTED TO	B42B53	172.	14.50	48.	14.	5.	.35
+	HYDROGRAPH AT	B53	982.	12.58	160.	49.	16.	1.10
+	DIVERSION TO	RB53	352.	12.17	38.	12.	4.	1.10
+	HYDROGRAPH AT	DB53RE	982.	12.58	139.	38.	13.	1.10
+	2 COMBINED AT	CPB53	982.	12.58	184.	52.	17.	1.45
+	ROUTED TO	B53B54	858.	12.83	180.	52.	17.	1.45
+	HYDROGRAPH AT	B49	639.	12.08	45.	14.	5.	.32
+	ROUTED TO	B49B50	348.	12.42	45.	14.	5.	.32
+	HYDROGRAPH AT	B50	1241.	12.17	103.	31.	10.	.71
+	HYDROGRAPH AT	LR02SD	0.	.00	0.	0.	0.	.86
+	ROUTED TO	B02B50	0.	.00	0.	0.	0.	.86
	3 COMBINED AT							

+	CPB50	1332.	12.17	147.	45.	15.	1.89
+ ROUTED TO	B50B51	1299.	12.17	147.	45.	15.	1.89
+ HYDROGRAPH AT	B51	1060.	12.17	89.	27.	9.	.61
+ 2 COMBINED AT	CPB51	2353.	12.17	235.	71.	24.	2.50
+ ROUTED TO	B51B52	1969.	12.33	235.	71.	24.	2.50
+ HYDROGRAPH AT	B52	1478.	12.17	158.	52.	17.	.84
+ DIVERSION TO	RB52	1478.	12.17	134.	37.	12.	.84
+ HYDROGRAPH AT	DB52RE	304.	12.50	47.	15.	5.	.84
+ 2 COMBINED AT	CPB52	1967.	12.33	275.	86.	29.	3.34
+ ROUTED TO	B52B54	1761.	12.58	275.	86.	29.	3.34
+ HYDROGRAPH AT	B54	1870.	12.25	199.	64.	21.	1.23
+ DIVERSION TO	RB54	1870.	12.25	171.	47.	16.	1.23
+ HYDROGRAPH AT	DB54RE	385.	12.50	54.	17.	6.	1.23
+ 4 COMBINED AT	CPB54	1802.	12.67	1007.	387.	131.	38.36
+ ROUTED TO	B54B57	1633.	12.92	996.	387.	131.	38.36
+ HYDROGRAPH AT	B55	946.	12.17	120.	41.	14.	.53
+ DIVERSION TO	RB55	946.	12.17	116.	33.	11.	.53
+ HYDROGRAPH AT	DB55RE	45.	13.83	23.	8.	3.	.53
+ ROUTED TO	B55B56	37.	14.83	22.	8.	3.	.53
+ HYDROGRAPH AT	B56	964.	12.67	193.	62.	21.	1.14
+ DIVERSION TO	RB56	964.	12.67	193.	55.	18.	1.14
+ HYDROGRAPH AT	DB56RE	35.	15.58	22.	8.	3.	1.14
+ 2 COMBINED AT	CPB56	62.	15.58	42.	16.	5.	1.67
+ ROUTED TO	B56B57	59.	16.00	42.	16.	5.	1.67
+ HYDROGRAPH AT	B57	1347.	12.33	147.	43.	14.	1.12
+ DIVERSION TO	RB57	1347.	12.33	147.	41.	14.	1.12
+ HYDROGRAPH AT	DB57RE	10.	17.58	7.	2.	1.	1.12
+ 3 COMBINED AT	CPB57	1633.	12.92	998.	392.	133.	41.14
+ ROUTED TO	B57B58	1486.	13.17	975.	387.	131.	41.14
+ HYDROGRAPH AT	B58	1416.	12.33	172.	52.	17.	1.20
+ DIVERSION TO	RB58	1416.	12.33	102.	28.	9.	1.20
+ HYDROGRAPH AT	DB58RE	1146.	12.50	85.	24.	8.	1.20
+ 2 COMBINED AT	CPB58	1563.	13.17	1000.	403.	136.	42.34
+ ROUTED TO	B58B59	1492.	13.42	996.	403.	136.	42.34
+ HYDROGRAPH AT	B59	1039.	12.25	134.	44.	15.	.70
+ DIVERSION TO	RB59	1039.	12.25	120.	33.	11.	.70
+ HYDROGRAPH AT	DB59RE	139.	12.83	32.	11.	4.	.70
+ 2 COMBINED AT	CPB59	1492.	13.42	1010.	409.	138.	43.04
+ HYDROGRAPH AT	B64	386.	12.17	46.	15.	5.	.23
+ DIVERSION TO	RB64	386.	12.17	42.	12.	4.	.23
HYDROGRAPH AT							

+		DB64RE	32.	12.92	11.	4.	1.	.23
+	ROUTED TO	B64B65	25.	13.50	10.	4.	1.	.23
+	DIVERSION TO	RB65	25.	13.50	10.	4.	1.	.23
+	HYDROGRAPH AT	DB65RE	0.	.00	0.	0.	0.	.23
+	HYDROGRAPH AT	B65	543.	12.08	53.	18.	6.	.23
+	DIVERSION TO	DB65	271.	12.08	26.	9.	3.	.23
+	HYDROGRAPH AT	DB65	271.	12.08	26.	9.	3.	.23
+	3 COMBINED AT	CPB65A	1498.	13.42	1010.	413.	140.	43.50
+	DIVERSION TO	DB65E	65.	13.42	3.	1.	0.	43.50
+	HYDROGRAPH AT	DB65BN	1433.	13.42	1008.	412.	140.	43.50
+	ROUTED TO	B6565B	1425.	13.42	1007.	412.	140.	43.50
+	HYDROGRAPH AT	B61	880.	12.50	132.	40.	13.	.96
+	DIVERSION TO	RB61	880.	12.50	128.	34.	11.	.96
+	HYDROGRAPH AT	DB61RE	42.	13.75	16.	6.	2.	.96
+	ROUTED TO	B61B62	31.	14.42	15.	6.	2.	.96
+	HYDROGRAPH AT	B62	423.	12.42	56.	16.	5.	.43
+	DIVERSION TO	RB62	423.	12.42	53.	14.	5.	.43
+	HYDROGRAPH AT	DB62RE	32.	13.25	7.	2.	1.	.43
+	2 COMBINED AT	CPB62	39.	14.42	21.	8.	3.	1.39
+	ROUTED TO	B62B63	38.	14.58	21.	8.	3.	1.39
+	HYDROGRAPH AT	B63	286.	12.08	29.	10.	3.	.12
+	DIVERSION TO	RB63	286.	12.08	25.	7.	2.	.12
+	HYDROGRAPH AT	DB63RE	30.	12.42	9.	3.	1.	.12
+	2 COMBINED AT	CPB63	45.	14.58	27.	11.	4.	1.51
+	ROUTED TO	SRB63	45.	14.67	27.	11.	4.	1.51
+	ROUTED TO	B63B65	43.	14.83	27.	11.	4.	1.51
+	HYDROGRAPH AT	DB65	271.	12.08	26.	9.	3.	.23
+	3 COMBINED AT	CPB65B	1436.	13.42	1010.	419.	143.	45.02
+	ROUTED TO	B65B66	1402.	13.67	1007.	419.	143.	45.02
+	HYDROGRAPH AT	S01	507.	12.17	54.	18.	6.	.27
+	DIVERSION TO	RS01	507.	12.17	54.	18.	6.	.27
+	HYDROGRAPH AT	DS01RE	0.	.00	0.	0.	0.	.27
+	DIVERSION TO	DS011S	0.	.00	0.	0.	0.	.27
+	HYDROGRAPH AT	DS011	0.	.00	0.	0.	0.	.27
+	DIVERSION TO	DS012S	0.	.00	0.	0.	0.	.27
+	HYDROGRAPH AT	DS012	0.	.00	0.	0.	0.	.27
+	ROUTED TO	S01B66	0.	.00	0.	0.	0.	.27
+	HYDROGRAPH AT	B66	1307.	12.17	139.	46.	15.	.76
+	DIVERSION TO	RB66	1307.	12.17	136.	38.	13.	.76
+	HYDROGRAPH AT	DB66RE	38.	14.08	21.	7.	2.	.76
	3 COMBINED AT							

+	CPB66	1402.	13.67	1009.	421.	144.	46.04
+ ROUTED TO	B66B68	1311.	14.00	1001.	419.	143.	46.04
+ HYDROGRAPH AT	DS011	0.	.00	0.	0.	0.	.27
+ ROUTED TO	S01S02	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	S02	878.	12.25	96.	30.	10.	.61
+ DIVERSION TO	RS02	878.	12.25	95.	27.	9.	.61
+ HYDROGRAPH AT	DS02RE	18.	14.67	11.	4.	1.	.61
+ 2 COMBINED AT	CPS02	18.	14.67	11.	4.	1.	.87
+ DIVERSION TO	DS021S	4.	14.67	2.	1.	0.	.87
+ HYDROGRAPH AT	DS021	14.	14.67	9.	3.	1.	.87
+ DIVERSION TO	DS022S	7.	14.67	4.	1.	0.	.87
+ HYDROGRAPH AT	DS022	8.	14.67	5.	2.	1.	.87
+ ROUTED TO	S02B67	7.	15.00	5.	2.	1.	.87
+ HYDROGRAPH AT	B67	521.	12.25	60.	20.	7.	.33
+ DIVERSION TO	RB67	521.	12.25	59.	17.	6.	.33
+ HYDROGRAPH AT	DB67RE	15.	14.33	8.	3.	1.	.33
+ HYDROGRAPH AT	DS012	0.	.00	0.	0.	0.	.27
+ ROUTED TO	S01B67	0.	.00	0.	0.	0.	.27
+ 3 COMBINED AT	CPB67	18.	15.00	13.	5.	2.	1.20
+ ROUTED TO	B67B68	18.	15.08	13.	5.	2.	1.20
+ HYDROGRAPH AT	B68	1167.	12.25	128.	41.	14.	.74
+ DIVERSION TO	RB68	1167.	12.25	128.	41.	14.	.74
+ HYDROGRAPH AT	DB68RE	1.	24.08	0.	0.	0.	.74
+ 3 COMBINED AT	CPB68	1311.	14.00	1001.	420.	143.	47.72
+ ROUTED TO	B68B69	1268.	14.25	990.	417.	142.	47.72
+ HYDROGRAPH AT	B69	1621.	12.17	172.	57.	19.	.91
+ DIVERSION TO	RB69	1621.	12.17	172.	50.	17.	.91
+ HYDROGRAPH AT	DB69RE	28.	15.67	20.	7.	2.	.91
+ HYDROGRAPH AT	DS022	7.	14.67	4.	1.	0.	.87
+ ROUTED TO	S02B69	6.	16.50	4.	1.	0.	.87
+ 3 COMBINED AT	CPB69	1268.	14.25	990.	418.	142.	48.62
+ ROUTED TO	B69B70	1227.	14.42	982.	416.	142.	48.62
+ HYDROGRAPH AT	B85	720.	12.17	94.	32.	11.	.41
+ DIVERSION TO	RB85	720.	12.17	84.	24.	8.	.41
+ HYDROGRAPH AT	DB85RE	79.	12.83	25.	9.	3.	.41
+ ROUTED TO	B85B86	60.	13.50	24.	9.	3.	.41
+ HYDROGRAPH AT	B86	928.	12.25	109.	35.	12.	.62
+ DIVERSION TO	RB86	623.	12.08	46.	14.	5.	.62
+ HYDROGRAPH AT	DB86RE	928.	12.25	77.	22.	7.	.62
+ 2 COMBINED AT	CPB86	927.	12.25	98.	30.	10.	1.03
ROUTED TO							

+	B86B89	724.	12.50	95.	30.	10.	1.03
+ HYDROGRAPH AT	B87	484.	12.17	49.	16.	5.	.27
+ DIVERSION TO	RB87	175.	11.92	15.	5.	2.	.27
+ HYDROGRAPH AT	DB87RE	484.	12.17	40.	11.	4.	.27
+ ROUTED TO	B87B88	256.	12.67	38.	11.	4.	.27
+ HYDROGRAPH AT	B88	609.	12.42	89.	29.	10.	.51
+ DIVERSION TO	RB88	198.	12.00	24.	8.	3.	.51
+ HYDROGRAPH AT	DB88RE	609.	12.42	77.	21.	7.	.51
+ 2 COMBINED AT	CPB88	657.	12.50	115.	33.	11.	.78
+ ROUTED TO	B88B89	603.	12.75	112.	33.	11.	.78
+ HYDROGRAPH AT	B89	598.	12.25	69.	23.	8.	.38
+ DIVERSION TO	RB89	430.	12.08	30.	9.	3.	.38
+ HYDROGRAPH AT	DB89RE	598.	12.25	49.	14.	5.	.38
+ 3 COMBINED AT	CPB89	1292.	12.50	254.	76.	25.	2.19
+ ROUTED TO	SRB89	371.	13.25	250.	76.	25.	2.19
+ DIVERSION TO	DB89SD	371.	13.25	250.	76.	25.	2.19
+ HYDROGRAPH AT	DB89SW	0.	.00	0.	0.	0.	2.19
+ ROUTED TO	B89B92	0.	.00	0.	0.	0.	2.19
+ HYDROGRAPH AT	B90	947.	12.08	89.	30.	10.	.46
+ DIVERSION TO	RB90	947.	12.08	89.	28.	9.	.46
+ HYDROGRAPH AT	DB90RE	10.	18.50	8.	2.	1.	.46
+ ROUTED TO	B90B91	10.	21.50	7.	2.	1.	.46
+ HYDROGRAPH AT	B91	1033.	12.17	107.	35.	12.	.59
+ DIVERSION TO	RB91	1033.	12.17	107.	35.	12.	.59
+ HYDROGRAPH AT	DB91RE	0.	.00	0.	0.	0.	.59
+ 2 COMBINED AT	CPB91	10.	21.50	7.	2.	1.	1.04
+ ROUTED TO	B91B92	9.	25.00	7.	2.	1.	1.04
+ HYDROGRAPH AT	B92	2037.	12.25	199.	61.	20.	1.37
+ DIVERSION TO	RB92	30.	9.58	19.	6.	2.	1.37
+ HYDROGRAPH AT	DB92RE	2037.	12.25	198.	55.	18.	1.37
+ 3 COMBINED AT	CPB92	2029.	12.25	197.	57.	19.	4.60
+ ROUTED TO	B92B70	2040.	12.25	197.	57.	19.	4.60
+ HYDROGRAPH AT	B70	206.	12.08	18.	6.	2.	.11
+ DIVERSION TO	RB70	206.	12.08	13.	4.	1.	.11
+ HYDROGRAPH AT	DB70RE	131.	12.25	8.	2.	1.	.11
+ 3 COMBINED AT	CPB70	2040.	12.25	1242.	560.	191.	53.33
+ ROUTED TO	B70B93	1779.	12.25	984.	454.	155.	53.33
+ HYDROGRAPH AT	B93	592.	12.33	84.	28.	10.	.42
+ DIVERSION TO	RB93	592.	12.33	73.	20.	7.	.42
+ HYDROGRAPH AT	DB93RE	109.	12.75	25.	8.	3.	.42
2 COMBINED AT							

+	CPB93	1779.	12.25	997.	459.	157.	53.76
+ ROUTED TO	B93B94	1491.	12.33	992.	458.	157.	53.76
+ HYDROGRAPH AT	B94	884.	12.17	86.	27.	9.	.51
+ DIVERSION TO	RB94	884.	12.17	86.	26.	9.	.51
+ HYDROGRAPH AT	DB94RE	6.	20.42	4.	1.	0.	.51
+ 2 COMBINED AT	CPB94	1491.	12.33	992.	458.	157.	54.26
+ 2 COMBINED AT	DUMMY	11866.	12.50	3249.	1297.	461.	143.03
+ HYDROGRAPH AT	B101	179.	12.08	18.	6.	2.	.08
+ ROUTED TO	SRB101	109.	12.17	18.	6.	2.	.08
+ ROUTED TO	B101S	87.	12.50	18.	6.	2.	.08
+ HYDROGRAPH AT	S06	557.	12.25	56.	17.	6.	.39
+ DIVERSION TO	RS06	557.	12.25	56.	17.	6.	.39
+ HYDROGRAPH AT	DS06RE	0.	.00	0.	0.	0.	.39
+ 2 COMBINED AT	CPS06	87.	12.50	18.	6.	2.	.47
+ ROUTED TO	S06S07	69.	13.08	18.	6.	2.	.47
+ HYDROGRAPH AT	S07	542.	12.33	65.	20.	7.	.42
+ DIVERSION TO	RS07	542.	12.33	65.	20.	7.	.42
+ HYDROGRAPH AT	DS07RE	1.	23.75	0.	0.	0.	.42
+ 2 COMBINED AT	CPS07	69.	13.08	18.	6.	2.	.89
+ ROUTED TO	S07S08	62.	13.50	18.	6.	2.	.89
+ HYDROGRAPH AT	S08	377.	12.25	39.	12.	4.	.27
+ DIVERSION TO	RS08	377.	12.25	39.	12.	4.	.27
+ HYDROGRAPH AT	DS08RE	0.	.00	0.	0.	0.	.27
+ 2 COMBINED AT	CPS08	62.	13.50	18.	6.	2.	1.16
+ ROUTED TO	S08S09	58.	13.75	17.	6.	2.	1.16
+ HYDROGRAPH AT	S09	580.	12.17	59.	19.	6.	.37
+ DIVERSION TO	RS09	580.	12.17	59.	19.	6.	.37
+ HYDROGRAPH AT	DS09RE	0.	.00	0.	0.	0.	.37
+ 2 COMBINED AT	CPS09	58.	13.75	17.	6.	2.	1.53
+ ROUTED TO	SRS09	0.	.00	0.	0.	0.	1.53
+ DIVERSION TO	DS091W	0.	.00	0.	0.	0.	1.53
+ HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+ DIVERSION TO	DS092W	0.	.00	0.	0.	0.	1.53
+ HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+ ROUTED TO	S09S23	0.	.00	0.	0.	0.	1.53
+ HYDROGRAPH AT	S21	248.	12.17	27.	9.	3.	.13
+ DIVERSION TO	RS21	248.	12.17	27.	8.	3.	.13
+ HYDROGRAPH AT	DS21RE	5.	16.00	3.	1.	0.	.13
+ DIVERSION TO	DS21S	2.	16.00	2.	1.	0.	.13
+ HYDROGRAPH AT	DS21SE	2.	16.00	2.	1.	0.	.13
ROUTED TO							

+	S21S23	2.	17.92	2.	1.	0.	.13
+ HYDROGRAPH AT	S22	304.	12.33	28.	7.	2.	.27
+ DIVERSION TO	RS22	304.	12.33	23.	6.	2.	.27
+ HYDROGRAPH AT	DS22RE	114.	12.58	5.	1.	0.	.27
+ ROUTED TO	S22S23	40.	13.17	5.	1.	0.	.27
+ HYDROGRAPH AT	S23	1623.	12.17	150.	47.	16.	1.03
+ DIVERSION TO	RS23	1623.	12.17	150.	47.	16.	1.03
+ HYDROGRAPH AT	DS23RE	0.	.00	0.	0.	0.	1.03
+ 4 COMBINED AT	CPS23	39.	13.17	6.	2.	1.	2.95
+ ROUTED TO	SRS23	47.	13.17	6.	2.	1.	2.95
+ ROUTED TO	S23S24	27.	13.67	5.	2.	1.	2.95
+ HYDROGRAPH AT	S24	689.	12.17	66.	21.	7.	.42
+ DIVERSION TO	RS24	689.	12.17	66.	21.	7.	.42
+ HYDROGRAPH AT	DS24RE	1.	21.50	0.	0.	0.	.42
+ HYDROGRAPH AT	S03	766.	12.50	116.	37.	12.	.72
+ DIVERSION TO	RS03	766.	12.50	116.	33.	11.	.72
+ HYDROGRAPH AT	DS03RE	15.	16.67	10.	3.	1.	.72
+ HYDROGRAPH AT	DS021	4.	14.67	2.	1.	0.	.87
+ ROUTED TO	S02S03	3.	15.75	2.	1.	0.	.87
+ 2 COMBINED AT	CPS03	18.	16.67	12.	4.	1.	1.59
+ ROUTED TO	S03S04	15.	18.92	11.	4.	1.	1.59
+ HYDROGRAPH AT	S04	1131.	12.17	122.	40.	13.	.70
+ DIVERSION TO	RS04	1131.	12.17	122.	39.	13.	.70
+ HYDROGRAPH AT	DS04RE	2.	23.17	0.	0.	0.	.70
+ 2 COMBINED AT	CPS04	15.	18.92	12.	4.	1.	2.30
+ ROUTED TO	SRS04	15.	18.92	11.	4.	1.	2.30
+ ROUTED TO	S04S10	13.	20.08	11.	4.	1.	2.30
+ HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+ ROUTED TO	S09S10	0.	.00	0.	0.	0.	1.53
+ HYDROGRAPH AT	S05	385.	12.17	40.	13.	4.	.21
+ DIVERSION TO	RS045	385.	12.17	40.	11.	4.	.21
+ HYDROGRAPH AT	DS05RE	8.	15.00	5.	2.	1.	.21
+ ROUTED TO	S05S10	7.	17.58	5.	2.	1.	.21
+ HYDROGRAPH AT	S10	845.	12.25	104.	33.	11.	.62
+ DIVERSION TO	RS10	845.	12.25	104.	33.	11.	.62
+ HYDROGRAPH AT	DS10RE	0.	.00	0.	0.	0.	.62
+ 4 COMBINED AT	CPS10	18.	20.08	15.	6.	2.	4.65
+ ROUTED TO	S10S24	17.	20.75	15.	6.	2.	4.65
+ HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+ ROUTED TO	S09S24	0.	.00	0.	0.	0.	1.53
4 COMBINED AT							

+	CPS24	27.	13.67	16.	8.	3.	6.49
+ ROUTED TO	S24S25	16.	24.33	14.	7.	2.	6.49
+ HYDROGRAPH AT	W21	264.	12.25	25.	7.	2.	.22
+ DIVERSION TO	DW21	264.	12.25	25.	7.	2.	.22
+ HYDROGRAPH AT	DW21RE	0.	.00	0.	0.	0.	.22
+ ROUTED TO	W21L50	0.	.00	0.	0.	0.	.22
+ HYDROGRAPH AT	L50	608.	12.25	63.	19.	6.	.50
+ DIVERSION TO	RL50	608.	12.25	63.	17.	6.	.50
+ HYDROGRAPH AT	DL50RE	7.	16.08	5.	2.	1.	.50
+ 2 COMBINED AT	CPL50	7.	16.08	5.	2.	1.	.72
+ ROUTED TO	L50L51	7.	16.50	5.	2.	1.	.72
+ HYDROGRAPH AT	L51	545.	12.33	55.	16.	5.	.50
+ DIVERSION TO	RL51	545.	12.33	52.	14.	5.	.50
+ HYDROGRAPH AT	DL51RE	27.	13.00	6.	2.	1.	.50
+ HYDROGRAPH AT	DL461	110.	12.33	24.	8.	3.	1.85
+ ROUTED TO	L46L51	106.	12.83	23.	8.	3.	1.85
+ 3 COMBINED AT	CPL51	126.	13.00	31.	11.	4.	3.07
+ ROUTED TO	L51L52	115.	13.17	30.	11.	4.	3.07
+ HYDROGRAPH AT	L52	499.	12.42	58.	17.	6.	.50
+ DIVERSION TO	RL52	499.	12.42	58.	16.	5.	.50
+ HYDROGRAPH AT	DL52RE	5.	16.58	4.	1.	0.	.50
+ HYDROGRAPH AT	DL462	50.	12.33	6.	2.	1.	1.85
+ ROUTED TO	L46L52	34.	12.92	6.	2.	1.	1.85
+ HYDROGRAPH AT	DL471	185.	12.33	34.	10.	3.	3.09
+ ROUTED TO	L47L52	185.	12.92	34.	10.	3.	3.09
+ 4 COMBINED AT	CPL52	325.	13.00	71.	24.	8.	4.80
+ DIVERSION TO	DL521S	28.	13.00	6.	2.	1.	4.80
+ HYDROGRAPH AT	DL521	298.	13.00	65.	22.	7.	4.80
+ DIVERSION TO	DL522S	14.	13.00	3.	1.	0.	4.80
+ HYDROGRAPH AT	DL522	284.	13.00	61.	21.	7.	4.80
+ ROUTED TO	L52L53	267.	13.25	61.	21.	7.	4.80
+ HYDROGRAPH AT	L53	1288.	12.33	155.	49.	16.	1.00
+ DIVERSION TO	RL53	1288.	12.33	152.	42.	14.	1.00
+ HYDROGRAPH AT	DL53RE	43.	13.92	21.	8.	3.	1.00
+ HYDROGRAPH AT	DL472	713.	12.50	68.	18.	6.	3.09
+ ROUTED TO	L47L53	535.	12.75	68.	18.	6.	3.09
+ HYDROGRAPH AT	DL481	11.	12.42	0.	0.	0.	5.09
+ ROUTED TO	L48L53	2.	13.58	0.	0.	0.	5.09
+ 4 COMBINED AT	CPL53	617.	12.83	134.	42.	14.	7.80
+ DIVERSION TO	DL531S	116.	12.83	12.	3.	1.	7.80
HYDROGRAPH AT							

+	DL531	501.	12.83	121.	39.	13.	7.80
+ DIVERSION TO	DL532S	14.	12.83	2.	1.	0.	7.80
+ HYDROGRAPH AT	DL532	487.	12.83	119.	38.	13.	7.80
+ ROUTED TO	L53L54	472.	13.00	118.	38.	13.	7.80
+ ROUTED TO	SRL54	207.	13.92	111.	38.	13.	7.80
+ ROUTED TO	L54L58	206.	14.08	111.	38.	13.	7.80
+ HYDROGRAPH AT	L55	517.	12.33	51.	14.	5.	.50
+ DIVERSION TO	RL55	517.	12.33	47.	12.	4.	.50
+ HYDROGRAPH AT	DL55RE	52.	12.83	6.	2.	1.	.50
+ DIVERSION TO	DL551S	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DL551	52.	12.83	6.	2.	1.	.50
+ DIVERSION TO	DL552S	3.	12.83	0.	0.	0.	.50
+ HYDROGRAPH AT	DL552	50.	12.83	6.	2.	1.	.50
+ ROUTED TO	L55L56	22.	13.33	6.	2.	1.	.50
+ HYDROGRAPH AT	L56	959.	12.42	99.	27.	9.	1.00
+ DIVERSION TO	RL56	959.	12.42	99.	27.	9.	1.00
+ HYDROGRAPH AT	DL56RE	0.	.00	0.	0.	0.	1.00
+ HYDROGRAPH AT	DL521	28.	13.00	6.	2.	1.	4.80
+ ROUTED TO	L52L56	25.	13.25	6.	2.	1.	4.80
+ 3 COMBINED AT	CPL56	38.	13.33	10.	4.	1.	6.30
+ DIVERSION TO	DL561S	0.	.00	0.	0.	0.	6.30
+ HYDROGRAPH AT	DL561	38.	13.33	10.	4.	1.	6.30
+ DIVERSION TO	DL562S	1.	13.33	0.	0.	0.	6.30
+ HYDROGRAPH AT	DL562	37.	13.33	10.	3.	1.	6.30
+ ROUTED TO	L56L57	32.	13.75	10.	3.	1.	6.30
+ HYDROGRAPH AT	L57	1341.	12.33	170.	55.	19.	1.00
+ DIVERSION TO	RL57	1341.	12.33	170.	52.	17.	1.00
+ HYDROGRAPH AT	DL57RE	17.	18.50	14.	4.	1.	1.00
+ HYDROGRAPH AT	DL522	14.	13.00	3.	1.	0.	4.80
+ ROUTED TO	L52L57	11.	14.33	3.	1.	0.	4.80
+ HYDROGRAPH AT	DL531	116.	12.83	12.	3.	1.	7.80
+ ROUTED TO	L53L57	89.	13.33	12.	3.	1.	7.80
+ 4 COMBINED AT	CPL57	96.	13.42	21.	9.	3.	10.30
+ DIVERSION TO	DL571S	6.	13.42	1.	0.	0.	10.30
+ HYDROGRAPH AT	DL571	89.	13.42	20.	8.	3.	10.30
+ DIVERSION TO	DL572S	4.	13.42	1.	0.	0.	10.30
+ HYDROGRAPH AT	DL572	85.	13.42	19.	8.	3.	10.30
+ ROUTED TO	L57L58	78.	13.67	19.	8.	3.	10.30
+ HYDROGRAPH AT	L58	777.	12.17	99.	34.	11.	.44
+ DIVERSION TO	RL58	777.	12.17	95.	27.	9.	.44
HYDROGRAPH AT							

+	DL58RE	47.	13.50	21.	7.	2.	.44
+ HYDROGRAPH AT	DL532	14.	12.83	2.	1.	0.	7.80
+ ROUTED TO	L53L58	9.	14.08	2.	1.	0.	7.80
+ 4 COMBINED AT	CPL58	305.	13.92	141.	50.	17.	10.74
+ ROUTED TO	L58L63	304.	13.92	141.	50.	17.	10.74
+ HYDROGRAPH AT	L63	202.	12.08	20.	7.	2.	.09
+ DIVERSION TO	RL63	202.	12.08	19.	5.	2.	.09
+ HYDROGRAPH AT	DL63RE	10.	13.17	4.	2.	1.	.09
+ HYDROGRAPH AT	DL572	4.	13.42	1.	0.	0.	10.30
+ ROUTED TO	L57L63	4.	13.92	1.	0.	0.	10.30
+ 3 COMBINED AT	CPL63	313.	13.92	145.	51.	17.	10.83
+ ROUTED TO	L63L64	309.	14.08	145.	51.	17.	10.83
+ HYDROGRAPH AT	L64	396.	12.17	45.	16.	5.	.20
+ DIVERSION TO	RL64	396.	12.17	39.	11.	4.	.20
+ HYDROGRAPH AT	DL64RE	46.	12.58	14.	5.	2.	.20
+ 2 COMBINED AT	CPL64	322.	14.08	154.	55.	18.	11.02
+ ROUTED TO	L64L67	314.	14.25	153.	55.	18.	11.02
+ HYDROGRAPH AT	L67	206.	12.17	24.	8.	3.	.10
+ DIVERSION TO	RL67	206.	12.17	19.	5.	2.	.10
+ HYDROGRAPH AT	DL67RE	78.	12.33	9.	3.	1.	.10
+ 2 COMBINED AT	CPL67	321.	14.17	158.	58.	19.	11.13
+ ROUTED TO	L67L68	321.	14.25	158.	58.	19.	11.13
+ HYDROGRAPH AT	L60	1491.	12.25	193.	65.	22.	1.00
+ DIVERSION TO	RL60	1491.	12.25	177.	50.	17.	1.00
+ HYDROGRAPH AT	DL60RE	136.	13.00	46.	16.	5.	1.00
+ HYDROGRAPH AT	DL552	3.	12.83	0.	0.	0.	.50
+ ROUTED TO	L55L60	1.	14.17	0.	0.	0.	.50
+ HYDROGRAPH AT	DL561	0.	.00	0.	0.	0.	6.30
+ ROUTED TO	L56L60	0.	.00	0.	0.	0.	6.30
+ 3 COMBINED AT	CPL60	149.	13.00	47.	16.	5.	7.30
+ DIVERSION TO	DL601S	55.	13.25	23.	8.	3.	7.30
+ HYDROGRAPH AT	DL601	50.	13.25	19.	7.	2.	7.30
+ DIVERSION TO	DL602S	10.	13.25	5.	2.	1.	7.30
+ HYDROGRAPH AT	DL602	40.	13.25	14.	5.	2.	7.30
+ ROUTED TO	L60L61	30.	13.83	14.	5.	2.	7.30
+ HYDROGRAPH AT	L61	890.	12.17	114.	39.	13.	.51
+ DIVERSION TO	RL61	890.	12.17	113.	33.	11.	.51
+ HYDROGRAPH AT	DL61RE	25.	15.08	17.	6.	2.	.51
+ HYDROGRAPH AT	DL562	1.	13.33	0.	0.	0.	6.30
+ ROUTED TO	L56L61	1.	14.50	0.	0.	0.	6.30
3 COMBINED AT							

+	CPL61	33.	16.08	25.	10.	3.	7.81
+ DIVERSION TO	DL61S	21.	16.08	16.	6.	2.	7.81
+ HYDROGRAPH AT	DL61SE	12.	16.08	9.	3.	1.	7.81
+ ROUTED TO	L61L62	11.	16.83	9.	3.	1.	7.81
+ HYDROGRAPH AT	L62	881.	12.17	110.	38.	13.	.49
+ DIVERSION TO	RL62	881.	12.17	110.	32.	11.	.49
+ HYDROGRAPH AT	DL62RE	24.	15.08	16.	6.	2.	.49
+ HYDROGRAPH AT	DL571	6.	13.42	1.	0.	0.	10.30
+ ROUTED TO	L57L62	3.	14.67	1.	0.	0.	10.30
+ 3 COMBINED AT	CPL62	26.	17.83	21.	8.	3.	12.30
+ ROUTED TO	L62L68	26.	18.33	20.	8.	3.	12.30
+ HYDROGRAPH AT	DL602	10.	13.25	5.	2.	1.	7.30
+ ROUTED TO	L60L68	8.	15.58	5.	2.	1.	7.30
+ HYDROGRAPH AT	DL61SE	21.	16.08	16.	6.	2.	7.81
+ ROUTED TO	L61L68	21.	16.83	16.	6.	2.	7.81
+ HYDROGRAPH AT	L68	1222.	12.33	142.	45.	15.	1.00
+ DIVERSION TO	RL68	826.	12.17	57.	17.	6.	1.00
+ HYDROGRAPH AT	DL68RE	1222.	12.33	101.	28.	9.	1.00
+ 5 COMBINED AT	CPL68	1158.	12.33	252.	94.	31.	14.13
+ HYDROGRAPH AT	W28	449.	12.25	39.	11.	4.	.35
+ DIVERSION TO	RW28	449.	12.25	39.	11.	4.	.35
+ HYDROGRAPH AT	DW28RE	0.	.00	0.	0.	0.	.35
+ ROUTED TO	W28W29	0.	.00	0.	0.	0.	.35
+ HYDROGRAPH AT	W29	632.	12.42	72.	21.	7.	.64
+ DIVERSION TO	RW29	632.	12.42	72.	21.	7.	.64
+ HYDROGRAPH AT	DW29RE	0.	.00	0.	0.	0.	.64
+ 2 COMBINED AT	CPW29	0.	.00	0.	0.	0.	.99
+ ROUTED TO	W29W30	0.	.00	0.	0.	0.	.99
+ HYDROGRAPH AT	W30	355.	12.25	30.	8.	3.	.27
+ DIVERSION TO	RW30	233.	12.08	11.	3.	1.	.27
+ HYDROGRAPH AT	DW30RE	355.	12.25	21.	5.	2.	.27
+ 2 COMBINED AT	CPW30	354.	12.25	21.	5.	2.	1.26
+ ROUTED TO	W30L59	239.	12.42	20.	5.	2.	1.26
+ HYDROGRAPH AT	L59	492.	12.33	48.	13.	4.	.50
+ DIVERSION TO	RL59	492.	12.33	48.	13.	4.	.50
+ HYDROGRAPH AT	DL59RE	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DL551	0.	.00	0.	0.	0.	.50
+ ROUTED TO	L55L59	0.	.00	0.	0.	0.	.50
+ 3 COMBINED AT	CPL59	239.	12.42	20.	5.	2.	2.26
+ ROUTED TO	L59L65	166.	12.83	20.	5.	2.	2.26
HYDROGRAPH AT							

+	W31	277.	12.25	23.	6.	2.	.23
+ DIVERSION TO	RW31	156.	12.08	8.	2.	1.	.23
+ HYDROGRAPH AT	DW31RE	277.	12.25	16.	4.	1.	.23
+ ROUTED TO	W31W32	167.	12.67	16.	4.	1.	.23
+ HYDROGRAPH AT	W32	540.	12.50	67.	19.	6.	.61
+ DIVERSION TO	RW32	370.	12.25	23.	6.	2.	.61
+ HYDROGRAPH AT	DW32RE	540.	12.50	48.	13.	4.	.61
+ 2 COMBINED AT	CPW32	619.	12.50	64.	17.	6.	.85
+ ROUTED TO	W32L65	587.	12.58	64.	17.	6.	.85
+ HYDROGRAPH AT	L65	843.	12.25	96.	32.	11.	.55
+ DIVERSION TO	RL65	843.	12.25	87.	24.	8.	.55
+ HYDROGRAPH AT	DL65RE	70.	12.83	23.	8.	3.	.55
+ 3 COMBINED AT	CPL65	683.	12.67	105.	30.	10.	3.65
+ ROUTED TO	L65L69	671.	12.75	104.	30.	10.	3.65
+ HYDROGRAPH AT	L69	123.	12.08	11.	4.	1.	.06
+ 2 COMBINED AT	CPL69	678.	12.75	112.	33.	11.	3.70
+ ROUTED TO	L69L70	672.	12.83	111.	33.	11.	3.70
+ HYDROGRAPH AT	L70	104.	12.08	9.	3.	1.	.05
+ 2 COMBINED AT	CPL70	677.	12.83	119.	36.	12.	3.75
+ ROUTED TO	L70L71	657.	12.83	117.	35.	12.	3.75
+ HYDROGRAPH AT	L66	1426.	12.33	207.	71.	24.	1.00
+ DIVERSION TO	RL66	1426.	12.33	167.	47.	16.	1.00
+ HYDROGRAPH AT	DL66RE	479.	12.67	73.	23.	8.	1.00
+ HYDROGRAPH AT	DL601	55.	13.25	23.	8.	3.	7.30
+ ROUTED TO	L60L66	44.	14.00	22.	8.	3.	7.30
+ 2 COMBINED AT	CPL66	479.	12.67	94.	32.	11.	8.30
+ ROUTED TO	L66L71	344.	12.75	86.	29.	10.	8.30
+ HYDROGRAPH AT	L71	206.	12.08	19.	6.	2.	.11
+ DIVERSION TO	RL71	3.	8.75	2.	1.	0.	.11
+ HYDROGRAPH AT	DL71RE	206.	12.08	19.	5.	2.	.11
+ 3 COMBINED AT	CPL71	873.	12.83	198.	66.	22.	11.66
+ ROUTED TO	L71L72	658.	12.83	94.	29.	10.	11.66
+ HYDROGRAPH AT	L72	412.	12.17	51.	18.	6.	.22
+ DIVERSION TO	RL72	11.	8.67	7.	2.	1.	.22
+ HYDROGRAPH AT	DL72RE	412.	12.17	51.	15.	5.	.22
+ 3 COMBINED AT	CPL72	1621.	12.33	443.	159.	53.	18.71
+ ROUTED TO	SRL72	185.	18.42	182.	134.	53.	18.71
+ ROUTED TO	L72RID	185.	18.42	182.	134.	53.	18.71
+ ROUTED TO	RIDS13	185.	18.58	182.	134.	53.	18.71
+ HYDROGRAPH AT	S12	421.	12.08	38.	12.	4.	.20
DIVERSION TO							

+	RS12	224.	12.00	17.	5.	2.	.20
+ HYDROGRAPH AT	DS12RE	421.	12.08	26.	7.	2.	.20
+ ROUTED TO	SRS12	232.	12.25	18.	6.	2.	.20
+ ROUTED TO	S12S13	102.	12.50	18.	6.	2.	.20
+ HYDROGRAPH AT	S13	534.	12.17	52.	17.	6.	.31
+ DIVERSION TO	RS13	534.	12.17	49.	14.	5.	.31
+ HYDROGRAPH AT	DS13RE	23.	13.17	9.	3.	1.	.31
+ 3 COMBINED AT	CPS13	197.	17.83	193.	141.	56.	19.22
+ DIVERSION TO	DS13S	0.	.00	0.	0.	0.	19.22
+ HYDROGRAPH AT	DS13SE	197.	17.83	193.	141.	56.	19.22
+ ROUTED TO	S13S19	197.	17.92	193.	141.	56.	19.22
+ HYDROGRAPH AT	S19	992.	12.33	123.	39.	13.	.81
+ DIVERSION TO	RS19	992.	12.33	123.	39.	13.	.81
+ HYDROGRAPH AT	DS19RE	0.	.00	0.	0.	0.	.81
+ 2 COMBINED AT	CPS19	199.	17.92	194.	142.	57.	20.02
+ ROUTED TO	S19S20	199.	18.00	194.	142.	57.	20.02
+ HYDROGRAPH AT	B95	174.	12.08	17.	6.	2.	.08
+ DIVERSION TO	RB95	174.	12.08	16.	5.	2.	.08
+ HYDROGRAPH AT	DB95RE	7.	13.58	3.	1.	0.	.08
+ ROUTED TO	B95B96	5.	16.50	3.	1.	0.	.08
+ HYDROGRAPH AT	B96	933.	12.25	94.	28.	9.	.69
+ DIVERSION TO	RB96	933.	12.25	65.	18.	6.	.69
+ HYDROGRAPH AT	DB96RE	616.	12.42	38.	11.	4.	.69
+ 2 COMBINED AT	CPB96	615.	12.42	40.	12.	4.	.77
+ ROUTED TO	B96B97	207.	13.08	37.	12.	4.	.77
+ HYDROGRAPH AT	B97	1003.	12.42	124.	37.	12.	.93
+ 2 COMBINED AT	CPB97	1001.	12.42	155.	48.	16.	1.70
+ DIVERSION TO	RB97	1001.	12.42	155.	47.	16.	1.70
+ HYDROGRAPH AT	DB97RE	13.	23.08	6.	2.	1.	1.70
+ ROUTED TO	SRB97	2.	27.50	2.	1.	1.	1.70
+ DIVERSION TO	DD97S	2.	27.50	2.	1.	1.	1.70
+ HYDROGRAPH AT	DB97SE	0.	.00	0.	0.	0.	1.70
+ ROUTED TO	B97B99	0.	.00	0.	0.	0.	1.70
+ HYDROGRAPH AT	B99	318.	12.08	28.	9.	3.	.16
+ DIVERSION TO	RB99	247.	12.00	15.	4.	1.	.16
+ HYDROGRAPH AT	DB99RE	288.	12.17	16.	5.	2.	.16
+ 2 COMBINED AT	CPB99	286.	12.17	16.	5.	2.	1.86
+ ROUTED TO	B99S11	183.	12.25	16.	5.	2.	1.86
+ HYDROGRAPH AT	S11	137.	12.08	14.	5.	2.	.06
+ DIVERSION TO	RS11	116.	12.08	9.	3.	1.	.06
HYDROGRAPH AT							

+	DS11RE	128.	12.17	8.	2.	1.	.06
+ 2 COMBINED AT	CPS11	258.	12.25	24.	7.	2.	1.92
+ ROUTED TO	SRS11	0.	.00	0.	0.	0.	1.92
+ ROUTED TO	S11S14	0.	.00	0.	0.	0.	1.92
+ HYDROGRAPH AT	S14	612.	12.17	59.	19.	6.	.36
+ DIVERSION TO	RS14	612.	12.17	59.	19.	6.	.36
+ HYDROGRAPH AT	DS14RE	1.	23.08	0.	0.	0.	.36
+ 2 COMBINED AT	CPS14A	0.	23.08	0.	0.	0.	2.28
+ HYDROGRAPH AT	DS13SE	0.	.00	0.	0.	0.	19.22
+ ROUTED TO	S13S14	0.	.00	0.	0.	0.	19.22
+ 2 COMBINED AT	CPS14B	0.	.00	0.	0.	0.	21.50
+ ROUTED TO	S14S16	0.	.00	0.	0.	0.	21.50
+ HYDROGRAPH AT	B98	425.	12.17	39.	12.	4.	.27
+ DIVERSION TO	RB98	425.	12.17	39.	12.	4.	.27
+ HYDROGRAPH AT	DB98RE	0.	.00	0.	0.	0.	.27
+ ROUTED TO	B98100	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	B100	265.	12.08	25.	8.	3.	.12
+ HYDROGRAPH AT	DB97SE	2.	27.50	2.	1.	1.	1.70
+ 3 COMBINED AT	CPB100	265.	12.08	25.	9.	4.	2.09
+ ROUTED TO	B100S	171.	12.17	24.	8.	3.	2.09
+ HYDROGRAPH AT	S15	722.	12.25	70.	22.	7.	.48
+ DIVERSION TO	RS15	722.	12.25	65.	17.	6.	.48
+ HYDROGRAPH AT	DS15RE	48.	12.75	13.	4.	1.	.48
+ 2 COMBINED AT	CPS15	171.	12.17	35.	13.	5.	2.57
+ ROUTED TO	S15S16	116.	12.58	35.	12.	5.	2.57
+ HYDROGRAPH AT	S16	784.	12.42	102.	31.	10.	.68
+ DIVERSION TO	RS16	784.	12.42	102.	31.	10.	.68
+ HYDROGRAPH AT	DS16RE	0.	.00	0.	0.	0.	.68
+ 3 COMBINED AT	CPS16	125.	12.58	40.	14.	5.	23.05
+ ROUTED TO	S16S18	89.	13.08	26.	10.	3.	23.05
+ HYDROGRAPH AT	S17	502.	12.17	53.	17.	6.	.26
+ DIVERSION TO	RS17	502.	12.17	52.	15.	5.	.26
+ HYDROGRAPH AT	DS17RE	11.	14.75	7.	3.	1.	.26
+ ROUTED TO	S17S18	10.	15.92	7.	3.	1.	.26
+ HYDROGRAPH AT	S18	807.	12.42	99.	29.	10.	.74
+ DIVERSION TO	RS18	807.	12.42	99.	29.	10.	.74
+ HYDROGRAPH AT	DS18RE	0.	.00	0.	0.	0.	.74
+ 3 COMBINED AT	CPS18	89.	13.08	27.	11.	4.	24.05
+ HYDROGRAPH AT	S20	722.	12.33	91.	28.	9.	.61
+ DIVERSION TO	RS20	722.	12.33	85.	23.	8.	.61
HYDROGRAPH AT							

+		DS20RE	55.	13.17	15.	5.	2.	.61
+	3 COMBINED AT	CPS20	209.	18.25	202.	146.	58.	25.47
+	ROUTED TO	S20S26	209.	18.33	202.	146.	58.	25.47
+	HYDROGRAPH AT	S26	290.	12.17	27.	8.	3.	.19
+	DIVERSION TO	RS26	290.	12.17	27.	8.	3.	.19
+	HYDROGRAPH AT	DS26RE	0.	.00	0.	0.	0.	.19
+	2 COMBINED AT	CPS26	209.	18.33	202.	146.	58.	25.65
+	ROUTED TO	S26S31	208.	18.42	202.	146.	57.	25.65
+	HYDROGRAPH AT	S26A	532.	12.17	55.	18.	6.	.28
+	DIVERSION TO	RS26A	532.	12.17	42.	12.	4.	.28
+	HYDROGRAPH AT	DS26AR	203.	12.25	21.	7.	2.	.28
+	HYDROGRAPH AT	DS21SE	2.	16.00	2.	1.	0.	.13
+	ROUTED TO	S2126A	2.	17.50	2.	1.	0.	.13
+	2 COMBINED AT	CPS26A	203.	12.25	22.	7.	2.	.40
+	DIVERSION TO	DS26S	6.	12.25	0.	0.	0.	.40
+	HYDROGRAPH AT	DS26SE	193.	12.25	22.	7.	2.	.40
+	ROUTED TO	26A31A	102.	12.67	21.	7.	2.	.40
+	HYDROGRAPH AT	S28	263.	12.08	19.	6.	2.	.14
+	DIVERSION TO	RS28	263.	12.08	19.	6.	2.	.14
+	HYDROGRAPH AT	DS28RE	0.	.00	0.	0.	0.	.14
+	ROUTED TO	S28S29	0.	.00	0.	0.	0.	.14
+	HYDROGRAPH AT	S29	760.	12.33	76.	22.	7.	.62
+	DIVERSION TO	RS29	760.	12.33	55.	15.	5.	.62
+	HYDROGRAPH AT	DS29RE	411.	12.50	26.	7.	2.	.62
+	2 COMBINED AT	CPS29	411.	12.50	26.	7.	2.	.76
+	ROUTED TO	S29S30	243.	12.75	26.	7.	2.	.76
+	HYDROGRAPH AT	S30	613.	12.25	62.	19.	6.	.47
+	DIVERSION TO	RS30	613.	12.25	62.	18.	6.	.47
+	HYDROGRAPH AT	DS30RE	3.	21.42	2.	1.	0.	.47
+	2 COMBINED AT	CPS30	243.	12.75	26.	8.	3.	1.22
+	ROUTED TO	S30S32	198.	12.83	25.	8.	3.	1.22
+	HYDROGRAPH AT	S32	232.	12.17	24.	8.	3.	.15
+	DIVERSION TO	RS32	232.	12.17	21.	6.	2.	.15
+	HYDROGRAPH AT	DS32RE	35.	12.58	6.	2.	1.	.15
+	2 COMBINED AT	CPS32	212.	12.83	31.	10.	3.	1.37
+	HYDROGRAPH AT	S31A	195.	12.08	18.	6.	2.	.09
+	DIVERSION TO	RS31A	195.	12.08	18.	6.	2.	.09
+	HYDROGRAPH AT	DS31AR	2.	21.33	1.	0.	0.	.09
+	HYDROGRAPH AT	S31	598.	12.25	64.	20.	7.	.46
+	DIVERSION TO	RS31	598.	12.25	64.	19.	6.	.46
	HYDROGRAPH AT							

+		DS31RE	4.	23.08	1.	0.	0.	.46
+	5 COMBINED AT	CPS31	276.	13.25	212.	153.	60.	27.97
+	ROUTED TO	SRS31	188.	23.17	186.	151.	60.	27.97
+	ROUTED TO	S31S27	188.	23.83	186.	150.	60.	27.97
+	HYDROGRAPH AT	S27	262.	12.08	24.	8.	3.	.12
+	DIVERSION TO	RS27	262.	12.08	24.	7.	2.	.12
+	HYDROGRAPH AT	DS27RE	5.	15.08	3.	1.	0.	.12
+	HYDROGRAPH AT	DS26SE	6.	12.25	0.	0.	0.	.40
+	ROUTED TO	S26A27	0.	12.33	0.	0.	0.	.40
+	3 COMBINED AT	CPS27	190.	23.83	186.	151.	60.	28.09
+	ROUTED TO	S27S82	190.	23.83	186.	150.	60.	28.09
+	HYDROGRAPH AT	S82	340.	12.17	34.	11.	4.	.17
+	DIVERSION TO	RS82	340.	12.17	34.	11.	4.	.17
+	HYDROGRAPH AT	DS82RE	1.	23.75	0.	0.	0.	.17
+	2 COMBINED AT	CPS82	190.	23.83	186.	150.	60.	28.26
+	ROUTED TO	S8281A	189.	23.92	186.	150.	60.	28.26
+	HYDROGRAPH AT	S81A	86.	12.08	7.	2.	1.	.04
+	DIVERSION TO	RS81A	86.	12.08	7.	2.	1.	.04
+	HYDROGRAPH AT	DS81AR	0.	.00	0.	0.	0.	.04
+	2 COMBINED AT	CPS81A	189.	23.92	186.	150.	60.	28.30
+	ROUTED TO	S81A25	189.	24.00	186.	150.	60.	28.30
+	HYDROGRAPH AT	S25	910.	12.25	106.	33.	11.	.59
+	DIVERSION TO	RS25	910.	12.25	106.	33.	11.	.59
+	HYDROGRAPH AT	DS25RE	1.	24.17	0.	0.	0.	.59
+	3 COMBINED AT	CPS25	190.	24.33	187.	150.	60.	35.25
+	HYDROGRAPH AT	S81	185.	12.08	15.	4.	1.	.09
+	DIVERSION TO	RS81	185.	12.08	15.	4.	1.	.09
+	HYDROGRAPH AT	DS81RE	1.	20.00	1.	0.	0.	.09
+	HYDROGRAPH AT	S82A	72.	12.08	7.	2.	1.	.03
+	DIVERSION TO	RS82A	72.	12.08	7.	2.	1.	.03
+	HYDROGRAPH AT	DS82AR	2.	14.17	1.	0.	0.	.03
+	ROUTED TO	S82A83	1.	17.75	1.	0.	0.	.03
+	HYDROGRAPH AT	S83	243.	12.42	33.	10.	3.	.22
+	DIVERSION TO	RS83	243.	12.42	20.	5.	2.	.22
+	HYDROGRAPH AT	DS83RE	190.	12.58	17.	5.	2.	.22
+	2 COMBINED AT	CPS83	190.	12.58	17.	5.	2.	.25
+	HYDROGRAPH AT	S84	345.	12.25	36.	10.	3.	.21
+	DIVERSION TO	RS84	246.	12.08	13.	3.	1.	.21
+	HYDROGRAPH AT	DS84RE	345.	12.25	25.	6.	2.	.21
+	5 COMBINED AT	DUMMY	11866.	12.50	3276.	1370.	496.	178.82
	HYDROGRAPH AT							

+	S35	1055.	12.25	89.	26.	9.	.74
+ DIVERSION TO	RS35	1051.	12.17	63.	17.	6.	.74
+ HYDROGRAPH AT	DS35RE	753.	12.33	32.	9.	3.	.74
+ ROUTED TO	S35S44	187.	13.08	30.	9.	3.	.74
+ HYDROGRAPH AT	S34	1362.	12.25	162.	53.	18.	.91
+ DIVERSION TO	RS34	1267.	12.17	86.	25.	8.	.91
+ HYDROGRAPH AT	DS34RE	1251.	12.33	99.	28.	9.	.91
+ DIVERSION TO	DS34S	672.	12.33	52.	15.	5.	.91
+ HYDROGRAPH AT	DS34SE	579.	12.33	47.	13.	4.	.91
+ ROUTED TO	S34S44	493.	12.42	47.	13.	4.	.91
+ HYDROGRAPH AT	S44	126.	12.17	9.	3.	1.	.08
+ DIVERSION TO	RS44	105.	12.08	5.	1.	0.	.08
+ HYDROGRAPH AT	DS44RE	114.	12.25	5.	1.	0.	.08
+ 3 COMBINED AT	CPS44	551.	12.33	81.	24.	8.	1.73
+ ROUTED TO	SRS44	34.	14.92	23.	9.	3.	1.73
+ ROUTED TO	S44S45	33.	15.92	22.	9.	3.	1.73
+ HYDROGRAPH AT	DS34SE	672.	12.33	52.	15.	5.	.91
+ ROUTED TO	S34S45	361.	12.67	50.	15.	5.	.91
+ HYDROGRAPH AT	S45	537.	12.42	69.	21.	7.	.49
+ DIVERSION TO	RS45	537.	12.42	69.	21.	7.	.49
+ HYDROGRAPH AT	DS45RE	0.	.00	0.	0.	0.	.49
+ 3 COMBINED AT	CPS45	361.	12.67	65.	24.	8.	2.22
+ ROUTED TO	S45S46	311.	12.83	64.	23.	8.	2.22
+ HYDROGRAPH AT	S46	1078.	12.33	122.	37.	12.	.90
+ DIVERSION TO	RS46	1078.	12.33	122.	37.	12.	.90
+ HYDROGRAPH AT	DS46RE	0.	.00	0.	0.	0.	.90
+ 2 COMBINED AT	CPS46	311.	12.83	64.	23.	8.	3.12
+ ROUTED TO	SRS46	213.	13.08	55.	21.	7.	3.12
+ ROUTED TO	S46S47	170.	13.58	53.	21.	7.	3.12
+ HYDROGRAPH AT	S47	697.	12.25	89.	30.	10.	.48
+ DIVERSION TO	RS47	697.	12.25	69.	19.	6.	.48
+ HYDROGRAPH AT	DS47RE	335.	12.50	35.	11.	4.	.48
+ 2 COMBINED AT	CPS47	334.	12.50	82.	32.	11.	3.60
+ ROUTED TO	S47S48	241.	12.83	81.	32.	11.	3.60
+ HYDROGRAPH AT	S48	510.	12.25	49.	15.	5.	.36
+ DIVERSION TO	RS48	357.	12.08	23.	6.	2.	.36
+ HYDROGRAPH AT	DS48RE	510.	12.25	32.	9.	3.	.36
+ 2 COMBINED AT	CPS48	506.	12.25	108.	40.	14.	3.96
+ DIVERSION TO	DS48S	2.	12.25	0.	0.	0.	3.96
+ HYDROGRAPH AT	DS48S	504.	12.25	108.	40.	14.	3.96
ROUTED TO							

+	S48S50	321.	12.50	105.	40.	14.	3.96
+ HYDROGRAPH AT	S49	503.	12.25	51.	15.	5.	.38
+ DIVERSION TO	RS49	503.	12.25	49.	13.	4.	.38
+ HYDROGRAPH AT	DS49RE	12.	13.50	6.	2.	1.	.38
+ ROUTED TO	S49S50	12.	14.33	6.	2.	1.	.38
+ HYDROGRAPH AT	S50	475.	12.17	47.	14.	5.	.31
+ DIVERSION TO	RS50	475.	12.17	44.	12.	4.	.31
+ HYDROGRAPH AT	DS50RE	19.	13.08	7.	3.	1.	.31
+ 3 COMBINED AT	CPS50	321.	12.50	116.	45.	15.	4.64
+ ROUTED TO	SRS50	160.	14.50	116.	44.	15.	4.64
+ ROUTED TO	S50S51	160.	14.50	116.	44.	15.	4.64
+ HYDROGRAPH AT	S36	465.	12.17	42.	14.	5.	.27
+ DIVERSION TO	RS36	465.	12.17	42.	14.	5.	.27
+ HYDROGRAPH AT	DS36RE	0.	.00	0.	0.	0.	.27
+ ROUTED TO	SRS36	0.	.00	0.	0.	0.	.27
+ ROUTED TO	S36S37	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	S37	1334.	12.25	133.	39.	13.	1.03
+ DIVERSION TO	RS37	1334.	12.25	116.	31.	10.	1.03
+ HYDROGRAPH AT	DS37RE	332.	12.58	28.	9.	3.	1.03
+ 2 COMBINED AT	CPS37	331.	12.58	28.	9.	3.	1.30
+ ROUTED TO	S37S38	146.	13.00	27.	9.	3.	1.30
+ HYDROGRAPH AT	S38	1053.	12.25	103.	31.	10.	.78
+ DIVERSION TO	RS38	1053.	12.25	99.	27.	9.	.78
+ HYDROGRAPH AT	DS38RE	29.	13.33	12.	4.	1.	.78
+ 2 COMBINED AT	CPS38	148.	13.00	38.	13.	4.	2.08
+ ROUTED TO	S38S39	116.	13.42	37.	13.	4.	2.08
+ HYDROGRAPH AT	S39	769.	12.25	80.	24.	8.	.60
+ DIVERSION TO	RS39	769.	12.25	80.	23.	8.	.60
+ HYDROGRAPH AT	DS39RE	5.	19.92	3.	1.	0.	.60
+ 2 COMBINED AT	CPS39	115.	13.42	37.	13.	4.	2.67
+ ROUTED TO	S39S43	98.	14.00	35.	13.	4.	2.67
+ HYDROGRAPH AT	S40	989.	12.17	113.	39.	13.	.51
+ DIVERSION TO	RS40	989.	12.17	98.	28.	9.	.51
+ HYDROGRAPH AT	DS40RE	129.	12.58	34.	11.	4.	.51
+ ROUTED TO	S40S41	91.	13.08	32.	11.	4.	.51
+ HYDROGRAPH AT	S41	1202.	12.33	132.	39.	13.	1.00
+ DIVERSION TO	RS41	1202.	12.33	122.	32.	11.	1.00
+ HYDROGRAPH AT	DS41RE	115.	12.83	21.	7.	2.	1.00
+ 2 COMBINED AT	CPS41	172.	13.00	53.	18.	6.	1.51
+ ROUTED TO	S41S42	151.	13.33	51.	18.	6.	1.51
HYDROGRAPH AT							

+	S42	745.	12.25	78.	24.	8.	.51
+ DIVERSION TO	RS42	745.	12.25	73.	20.	7.	.51
+ HYDROGRAPH AT	DS42RE	39.	13.00	14.	5.	2.	.51
+ 2 COMBINED AT	CPS42	180.	13.33	64.	23.	8.	2.02
+ ROUTED TO	S42S43	166.	13.58	63.	23.	8.	2.02
+ HYDROGRAPH AT	S43	548.	12.17	55.	17.	6.	.35
+ DIVERSION TO	RS43	548.	12.17	51.	14.	5.	.35
+ HYDROGRAPH AT	DS43RE	29.	12.92	10.	3.	1.	.35
+ 3 COMBINED AT	CPS43	232.	13.92	104.	39.	13.	5.05
+ ROUTED TO	SRS43	60.	18.42	59.	39.	13.	5.05
+ ROUTED TO	S43S51	60.	18.92	59.	39.	13.	5.05
+ HYDROGRAPH AT	S33	507.	12.25	60.	20.	7.	.31
+ DIVERSION TO	RS33	507.	12.25	60.	18.	6.	.31
+ HYDROGRAPH AT	DS33RE	8.	16.92	6.	2.	1.	.31
+ ROUTED TO	S33S51	7.	18.92	5.	2.	1.	.31
+ HYDROGRAPH AT	S51	249.	12.17	25.	8.	3.	.12
+ DIVERSION TO	RS51	249.	12.17	22.	6.	2.	.12
+ HYDROGRAPH AT	DS51RE	18.	12.67	6.	2.	1.	.12
+ 4 COMBINED AT	CPS51	169.	14.83	134.	74.	25.	10.12
+ ROUTED TO	SRS51	95.	22.17	82.	29.	10.	10.12
+ ROUTED TO	S51S54	95.	22.42	81.	29.	10.	10.12
+ HYDROGRAPH AT	S52	539.	12.42	63.	16.	5.	.42
+ DIVERSION TO	RS52	539.	12.42	48.	12.	4.	.42
+ HYDROGRAPH AT	DS52RE	281.	12.67	16.	4.	1.	.42
+ ROUTED TO	S52S54	129.	13.08	16.	4.	1.	.42
+ HYDROGRAPH AT	S54	914.	12.08	93.	32.	11.	.42
+ DIVERSION TO	RS54	914.	12.08	76.	21.	7.	.42
+ HYDROGRAPH AT	DS54RE	218.	12.33	32.	10.	3.	.42
+ 3 COMBINED AT	CPS54	143.	13.17	80.	40.	14.	10.95
+ ROUTED TO	S54S55	116.	13.50	79.	40.	14.	10.95
+ HYDROGRAPH AT	S53	584.	12.33	63.	17.	6.	.40
+ DIVERSION TO	RS53	584.	12.33	50.	13.	4.	.40
+ HYDROGRAPH AT	DS53RE	269.	12.58	16.	4.	1.	.40
+ ROUTED TO	S53S55	109.	13.17	15.	4.	1.	.40
+ HYDROGRAPH AT	S55	1265.	12.25	174.	59.	20.	.75
+ DIVERSION TO	RS55	1265.	12.25	142.	40.	13.	.75
+ HYDROGRAPH AT	DS55RE	440.	12.58	60.	19.	6.	.75
+ 3 COMBINED AT	CPS55	274.	12.67	101.	58.	20.	12.11
+ ROUTED TO	S55S74	244.	14.08	95.	58.	20.	12.11
+ HYDROGRAPH AT	S56	936.	12.25	107.	36.	12.	.61
DIVERSION TO							

+		RS56	936.	12.25	77.	22.	7.	.61
+	HYDROGRAPH AT	DS56RE	480.	12.33	46.	14.	5.	.61
+	ROUTED TO	S56S57	267.	12.67	44.	14.	5.	.61
+	HYDROGRAPH AT	S57	1090.	12.25	123.	40.	13.	.77
+	DIVERSION TO	RS57	1090.	12.25	80.	22.	7.	.77
+	HYDROGRAPH AT	DS57RE	798.	12.33	60.	18.	6.	.77
+	2 COMBINED AT	CPS57	786.	12.33	103.	31.	10.	1.37
+	ROUTED TO	S57S58	575.	12.58	101.	31.	10.	1.37
+	HYDROGRAPH AT	DS48S	2.	12.25	0.	0.	0.	3.96
+	ROUTED TO	S48S58	1.	12.83	0.	0.	0.	3.96
+	HYDROGRAPH AT	S58	366.	12.17	38.	13.	4.	.20
+	DIVERSION TO	RS58	366.	12.17	37.	11.	4.	.20
+	HYDROGRAPH AT	DS58RE	12.	13.92	6.	2.	1.	.20
+	3 COMBINED AT	CPS58	575.	12.58	107.	34.	11.	5.53
+	ROUTED TO	SRS58	559.	12.58	104.	33.	11.	5.53
+	ROUTED TO	S58S59	489.	12.83	102.	33.	11.	5.53
+	HYDROGRAPH AT	S59	352.	12.08	30.	10.	3.	.17
+	DIVERSION TO	RS59	352.	12.08	30.	9.	3.	.17
+	HYDROGRAPH AT	DS59RE	6.	14.67	4.	1.	0.	.17
+	2 COMBINED AT	CPS59	488.	12.83	105.	34.	11.	5.70
+	ROUTED TO	SRS59	154.	13.67	69.	27.	9.	5.70
+	ROUTED TO	S59S74	137.	14.42	66.	27.	9.	5.70
+	HYDROGRAPH AT	S72	625.	12.33	85.	27.	9.	.40
+	DIVERSION TO	RS72	625.	12.33	66.	18.	6.	.40
+	HYDROGRAPH AT	DS72RE	277.	12.58	29.	9.	3.	.40
+	ROUTED TO	S72S73	147.	13.00	28.	9.	3.	.40
+	HYDROGRAPH AT	S73	521.	12.17	62.	20.	7.	.28
+	DIVERSION TO	RS73	521.	12.17	42.	12.	4.	.28
+	HYDROGRAPH AT	DS73RE	366.	12.33	28.	8.	3.	.28
+	2 COMBINED AT	CPS73	366.	12.33	55.	17.	6.	.68
+	ROUTED TO	S73S74	154.	13.50	52.	17.	6.	.68
+	HYDROGRAPH AT	S74	2118.	12.42	332.	108.	36.	1.61
+	DIVERSION TO	RS74	2118.	12.42	261.	72.	24.	1.61
+	HYDROGRAPH AT	DS74RE	1013.	12.75	114.	35.	12.	1.61
+	4 COMBINED AT	CPS74	720.	12.83	264.	118.	40.	16.14
+	DIVERSION TO	DS741W	316.	12.83	113.	51.	17.	16.14
+	HYDROGRAPH AT	DS741	404.	12.83	150.	67.	23.	16.14
+	DIVERSION TO	DS742W	31.	12.83	16.	7.	2.	16.14
+	HYDROGRAPH AT	DS742	374.	12.83	134.	60.	20.	16.14
+	ROUTED TO	S74S79	213.	13.50	130.	60.	20.	16.14
	HYDROGRAPH AT							

+	S79	1233.	12.33	151.	44.	15.	.92
+ DIVERSION TO	RS79	1233.	12.33	119.	31.	10.	.92
+ HYDROGRAPH AT	DS79RE	553.	12.67	43.	12.	4.	.92
+ 2 COMBINED AT	CPS79	357.	12.75	154.	68.	23.	17.05
+ ROUTED TO	S79S80	218.	13.83	150.	68.	23.	17.05
+ HYDROGRAPH AT	S92	1140.	12.25	150.	49.	16.	.69
+ DIVERSION TO	RS92	1140.	12.25	121.	33.	11.	.69
+ HYDROGRAPH AT	DS92RE	400.	12.58	50.	16.	5.	.69
+ HYDROGRAPH AT	DS741	316.	12.83	113.	51.	17.	16.14
+ ROUTED TO	S74S92	254.	13.00	112.	51.	17.	16.14
+ 2 COMBINED AT	CPS92	386.	12.92	162.	69.	23.	16.82
+ ROUTED TO	S92S80	273.	13.50	145.	63.	21.	16.82
+ HYDROGRAPH AT	DS742	31.	12.83	16.	7.	2.	16.14
+ ROUTED TO	S74S80	23.	15.08	15.	7.	2.	16.14
+ HYDROGRAPH AT	S80	456.	12.42	54.	16.	5.	.44
+ DIVERSION TO	RS80	456.	12.42	44.	12.	4.	.44
+ HYDROGRAPH AT	DS80RE	175.	12.75	14.	4.	1.	.44
+ 4 COMBINED AT	CPS80	449.	13.67	309.	138.	47.	18.18
+ HYDROGRAPH AT	S90	190.	12.17	19.	6.	2.	.09
+ DIVERSION TO	RS90	190.	12.17	15.	4.	1.	.09
+ HYDROGRAPH AT	DS90RE	59.	12.33	6.	2.	1.	.09
+ ROUTED TO	S90S91	30.	12.67	6.	2.	1.	.09
+ HYDROGRAPH AT	S91	372.	12.25	43.	13.	4.	.22
+ DIVERSION TO	RS91	360.	12.17	27.	7.	2.	.22
+ HYDROGRAPH AT	DS91RE	328.	12.33	21.	6.	2.	.22
+ 2 COMBINED AT	CPS91	328.	12.33	27.	8.	3.	.31
+ HYDROGRAPH AT	S89	329.	12.25	33.	9.	3.	.20
+ DIVERSION TO	RS89	329.	12.25	23.	6.	2.	.20
+ HYDROGRAPH AT	DS89RE	203.	12.42	12.	3.	1.	.20
+ HYDROGRAPH AT	S88	135.	12.17	11.	3.	1.	.07
+ DIVERSION TO	RS88	129.	12.17	7.	2.	1.	.07
+ HYDROGRAPH AT	DS88RE	110.	12.25	4.	1.	0.	.07
+ HYDROGRAPH AT	S87	219.	12.17	24.	7.	2.	.12
+ DIVERSION TO	RS87	219.	12.17	18.	5.	2.	.12
+ HYDROGRAPH AT	DS87RE	100.	12.42	8.	2.	1.	.12
+ HYDROGRAPH AT	S86	356.	12.17	30.	8.	3.	.20
+ DIVERSION TO	RS86	356.	12.17	24.	6.	2.	.20
+ HYDROGRAPH AT	DS86RE	147.	12.42	7.	2.	1.	.20
+ HYDROGRAPH AT	S85	450.	12.33	49.	13.	4.	.34
+ DIVERSION TO	RS85	450.	12.33	40.	10.	3.	.34
HYDROGRAPH AT							

+	DS85RE	155.	12.67	9.	2.	1.	.34
+ 4 COMBINED AT	DUMMY	276.	12.42	27.	8.	3.	.73
+ 5 COMBINED AT	DUMMY	11866.	12.50	3335.	1419.	512.	198.24
+ HYDROGRAPH AT	W59	328.	12.08	32.	11.	4.	.17
+ DIVERSION TO	RW59	328.	12.08	29.	8.	3.	.17
+ HYDROGRAPH AT	DW59RE	26.	12.67	9.	3.	1.	.17
+ ROUTED TO	W59W60	23.	12.92	8.	3.	1.	.17
+ HYDROGRAPH AT	W61	664.	12.17	53.	17.	6.	.39
+ DIVERSION TO	RW61	664.	12.17	51.	14.	5.	.39
+ HYDROGRAPH AT	DW61RE	19.	13.17	8.	3.	1.	.39
+ DIVERSION TO	DW61S	19.	13.17	8.	3.	1.	.39
+ HYDROGRAPH AT	DW61SE	0.	.00	0.	0.	0.	.39
+ HYDROGRAPH AT	W60	349.	12.08	36.	12.	4.	.16
+ DIVERSION TO	RW60	349.	12.08	29.	8.	3.	.16
+ HYDROGRAPH AT	DW60RE	77.	12.33	12.	4.	1.	.16
+ 3 COMBINED AT	CPW60	77.	12.33	20.	7.	2.	.72
+ ROUTED TO	SRW60	33.	13.33	20.	7.	2.	.72
+ ROUTED TO	W60S61	33.	13.83	19.	7.	2.	.72
+ HYDROGRAPH AT	S61	449.	12.08	36.	12.	4.	.23
+ DIVERSION TO	RS61	449.	12.08	28.	8.	3.	.23
+ HYDROGRAPH AT	DS61RE	172.	12.25	13.	4.	1.	.23
+ 2 COMBINED AT	CPS61	171.	12.25	31.	11.	4.	.95
+ ROUTED TO	S61S62	73.	12.33	30.	11.	4.	.95
+ HYDROGRAPH AT	S62	296.	12.08	29.	10.	3.	.13
+ DIVERSION TO	RS62	296.	12.08	23.	7.	2.	.13
+ HYDROGRAPH AT	DS62RE	93.	12.25	11.	4.	1.	.13
+ 2 COMBINED AT	CPS62	134.	12.25	41.	14.	5.	1.08
+ ROUTED TO	S62S64	83.	12.75	39.	14.	5.	1.08
+ HYDROGRAPH AT	S63	906.	12.17	86.	27.	9.	.60
+ DIVERSION TO	RS63	95.	11.83	19.	6.	2.	.60
+ HYDROGRAPH AT	DS63RE	906.	12.17	78.	21.	7.	.60
+ ROUTED TO	S63S64	818.	12.25	78.	21.	7.	.60
+ HYDROGRAPH AT	S64	866.	12.17	95.	32.	11.	.47
+ DIVERSION TO	RS64	866.	12.17	92.	26.	9.	.47
+ HYDROGRAPH AT	DS64RE	39.	13.58	18.	6.	2.	.47
+ 3 COMBINED AT	CPS64	818.	12.25	130.	42.	14.	2.16
+ ROUTED TO	S64S67	789.	12.33	128.	42.	14.	2.16
+ HYDROGRAPH AT	S67	278.	12.17	25.	8.	3.	.16
+ DIVERSION TO	RS67	278.	12.17	20.	5.	2.	.16
+ HYDROGRAPH AT	DS67RE	111.	12.33	8.	3.	1.	.16
2 COMBINED AT							

+	CPS67	896.	12.33	136.	44.	15.	2.32
+ ROUTED TO	S6768A	728.	12.42	134.	44.	15.	2.32
+ ROUTED TO	S6768B	641.	12.50	133.	44.	15.	2.32
+ HYDROGRAPH AT	S68	406.	12.33	43.	13.	4.	.34
+ DIVERSION TO	RS68	332.	12.17	18.	5.	2.	.34
+ HYDROGRAPH AT	DS68RE	406.	12.33	29.	8.	3.	.34
+ 2 COMBINED AT	CPS68	869.	12.42	161.	52.	17.	2.65
+ ROUTED TO	S6869A	828.	12.58	159.	52.	17.	2.65
+ ROUTED TO	S6869B	720.	12.67	157.	52.	17.	2.65
+ HYDROGRAPH AT	S69	725.	12.25	85.	28.	9.	.47
+ DIVERSION TO	RS69	725.	12.25	60.	17.	6.	.47
+ HYDROGRAPH AT	DS69RE	415.	12.33	38.	11.	4.	.47
+ 2 COMBINED AT	CPS69	816.	12.67	193.	63.	21.	3.12
+ ROUTED TO	S69S70	762.	12.83	190.	63.	21.	3.12
+ HYDROGRAPH AT	S70	1361.	12.17	139.	46.	15.	.75
+ DIVERSION TO	RS70	1361.	12.17	139.	40.	13.	.75
+ HYDROGRAPH AT	DS70RE	26.	15.42	17.	6.	2.	.75
+ 2 COMBINED AT	CPS70	762.	12.83	201.	69.	23.	3.87
+ ROUTED TO	S70S71	691.	13.08	196.	69.	23.	3.87
+ HYDROGRAPH AT	S71	207.	12.17	22.	7.	2.	.13
+ DIVERSION TO	RS71	207.	12.17	18.	5.	2.	.13
+ HYDROGRAPH AT	DS71RE	50.	12.50	6.	2.	1.	.13
+ 2 COMBINED AT	CPS71	702.	13.08	201.	70.	23.	4.00
+ ROUTED TO	S71S78	634.	13.33	196.	70.	23.	4.00
+ HYDROGRAPH AT	S78	282.	12.25	32.	11.	4.	.18
+ DIVERSION TO	RS78	282.	12.25	32.	9.	3.	.18
+ HYDROGRAPH AT	DS78RE	8.	14.33	5.	2.	1.	.18
+ 2 COMBINED AT	CPS78	634.	13.33	200.	72.	24.	4.18
+ HYDROGRAPH AT	DW61SE	19.	13.17	8.	3.	1.	.39
+ ROUTED TO	W61S65	13.	15.75	8.	3.	1.	.39
+ HYDROGRAPH AT	S65	1137.	12.33	152.	50.	17.	.88
+ DIVERSION TO	RS65	1137.	12.33	109.	31.	10.	.88
+ HYDROGRAPH AT	DS65RE	731.	12.50	64.	19.	6.	.88
+ 2 COMBINED AT	CPS65	728.	12.50	70.	22.	7.	1.27
+ ROUTED TO	S65S66	270.	13.25	65.	22.	7.	1.27
+ HYDROGRAPH AT	S66	911.	12.25	100.	31.	10.	.65
+ DIVERSION TO	RS66	911.	12.25	100.	31.	10.	.65
+ HYDROGRAPH AT	DS66RE	0.	.00	0.	0.	0.	.65
+ 2 COMBINED AT	CPS66	270.	13.25	65.	22.	7.	1.92
+ ROUTED TO	SRS66	252.	13.33	65.	22.	7.	1.92
ROUTED TO							

+		S66S75	225.	13.50	64.	22.	7.	1.92
+	HYDROGRAPH AT	S75	480.	12.25	53.	17.	6.	.34
+	DIVERSION TO	RS75	480.	12.25	44.	12.	4.	.34
+	HYDROGRAPH AT	DS75RE	147.	12.50	16.	5.	2.	.34
+	2 COMBINED AT	CPS75	244.	13.50	77.	27.	9.	2.26
+	ROUTED TO	S75S76	230.	13.75	75.	27.	9.	2.26
+	HYDROGRAPH AT	S76	1707.	12.25	223.	77.	26.	1.01
+	DIVERSION TO	RS76	1707.	12.25	195.	55.	18.	1.01
+	HYDROGRAPH AT	DS76RE	223.	12.75	65.	22.	7.	1.01
+	2 COMBINED AT	CPS76	320.	13.75	138.	48.	16.	3.27
+	ROUTED TO	S76S77	299.	14.00	135.	48.	16.	3.27
+	HYDROGRAPH AT	S77	1227.	12.25	155.	51.	17.	.91
+	DIVERSION TO	RS77	1227.	12.25	112.	31.	10.	.91
+	HYDROGRAPH AT	DS77RE	690.	12.50	64.	19.	6.	.91
+	2 COMBINED AT	CPS77	687.	12.50	192.	67.	22.	4.18

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

Future w/CIP Conditions HEC-1 (MB02)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            JUN   1998                 *
*          VERSION 4.1                  *
*                                       *
*  RUN DATE   02SEP09  TIME  19:08:35   *
*                                       *
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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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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
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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


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

  1           ID        Flood Control District of Maricopa County
  2           ID        L303_FU_CIP_MB02 - Loop 303/ White Tanks ADMPU AHA
  3           ID        100 YEAR
  4           ID        24 Hour Storm
  5           ID        Unit Hydrograph: S-Graph
  6           ID        09/02/2009
  7           ID            FCDMC CONTRACT 2007C031
  8           ID            BY HDR ENGINEERING (#79902)
  9           ID            FUTURE CONDITIONS-SEPTEMBER 2009
 10           ID            MAJOR BASIN 02
 11           ID            FILE NAME: FCIP-MB2.DAT
 12           IT       5        0       0    2000
 13           IN      15
 14           IO       3
              *DIAGRAM
              *
 15           JD   3.941  0.0001
 16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
 18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
 19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.563   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
 26           JD   3.843     5.0
 27           JD   3.744    10.0
 28           JD   3.646    20.0
 29           JD   3.547    30.0
 30           JD   3.429    60.0
              *

 31           KK     L21BASIN
 32           KM        BASIN BOUNDARY FROM MCMICKEN DAM ON THE WEST AND THE
 33           KM        BEARDSLEY CSR ON THE EAST
 34           BA   0.525
 35           LG    0.33    0.24    4.55    0.44      14
 36           UI       0      21      21      21      27      70      79      96     107     116
 37           UI     124     136     151     163     189     232     260     263     226     200
 38           UI     185     169     155     139     127     114     105      95      77      60
 39           UI      42      37      36      34      31      21      21      21      16       6
 40           UI       7       6       7       6       7       6       7       6       7       6
              *

 41           KK  DL21REDIVERT
 42           KM        Mass grading and Storage along canal
 43           DT    RL21    81.8     0.0
 44           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 45           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 46           KK  L21L22ROUTE
 47           KM        Cross-section determined from A-team survey
 48           KM        Manning's N Value: earth w/sparse trees and brush, ponding against canal
 49           RS       1    FLOW
 50           RC   0.032   0.032   0.032    8793  0.0020    0.00
 51           RX  100.00  101.00  107.00  117.00  169.00  409.00  512.00  513.00
 52           RY  1328.1 1328.00 1326.00 1324.00 1324.10 1326.00 1328.00 1328.10
              *

 53           KK     L22BASIN
 54           KM        BASIN BOUNDARY FROM MCMICKEN DAM ON THE WEST AND THE
 55           KM        BEARDSLEY CSR ON THE EAST
 56           BA   0.362
 57           LG    0.45    0.24    4.35    0.57       1
 58           UI       0      10      11      10      10      11      22      29      38      44
 59           UI      51      58      65      71      74      84      87      94      93      96
 60           UI     100      99      99     100      95      94      91      84      78      73
 61           UI      68      62      59      54      50      47      44      40      37      35
 62           UI      32      30      28      25      23      22      20      20      18      16
              *

 63           KK  DL22REDIVERT
 64           KM        Storage along canal
 65           DT    RL22    17.8     0.0
 66           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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 67          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

 68          KK   CPL22COMBINE
 69          HC       2   0.887
             *

 70          KK  L22W01ROUTE
 71          KM        Cross-section determined from 1991 topo
 72          KM        Manning's N Value: earth w/ sparse trees and brush
 73          RS       1    FLOW
 74          RC   0.032   0.032   0.032    3159  0.0063    0.00
 75          RX  100.00  101.00  102.00  115.00  128.00  140.00  141.00  142.00
 76          RY  1320.2 1320.10 1320.00 1314.00 1314.10 1320.00 1320.10 1320.20
             *

 77          KK     W01BASIN
 78          KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
 79          BA   0.191
 80          LG    0.48    0.24    3.95    0.40       0
 81          UI       0      16      23      56      90     120     142     153     155     141
 82          UI     117      94      75      60      49      38      31      25      19      17
 83          UI      11      11       9       4       3       4       4       4       4       4
 84          UI       0       0       0       0       0       0       0       0       0       0
 85          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  3

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

 86          KK   CPW01COMBINE
 87          HC       2   1.078
             *

 88          KK  W01W02ROUTE
 89          KM        Assumed 25' bottom width, 4:1 sideslopes,
 90          KM        6' depth; Mannings N Value: 0.035
 91          RS       2    FLOW
 92          RC   0.035   0.035   0.035    2650  0.0053    0.00
 93          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
 94          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

 95          KK     W02BASIN
 96          KM        BASIN BOUNDARY FROM 1990 TOPO, ALL FLOW TO SOUTH
 97          KM        FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
 98          BA   0.394
 99          LG    0.31    0.25    4.65    0.40      16
100          UI       0      58     223     334     483     690     475     337     212      99
101          UI      65      28      17      18       0       0       0       0       0       0
102          UI       0       0       0       0       0       0       0       0       0       0
103          UI       0       0       0       0       0       0       0       0       0       0
104          UI       0       0       0       0       0       0       0       0       0       0
             *

105          KK  DW02REDIVERT
106          KM        Additional Retention based on 100yr 2hr retention.
107          KM        C value is based on future land use, P=2.7, A=acres
108          DT    DW02    20.2     0.0
109          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
110          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

111          KK   CPW02COMBINE
112          HC       2   1.472
             *

113          KK  W02W05ROUTE
114          KM        Cross-section: Natural Desert Wash w/ vegatation
115          RS       1    FLOW
116          RC   0.035   0.035   0.035    2214  0.0045    0.00
117          RX  100.00  106.00  112.00  119.00  135.00  137.00  138.00  141.00
118          RY  1280.0 1278.00 1277.00 1276.00 1275.90 1277.00 1278.00 1280.00
             *

119          KK     W03BASIN
120          KM        BASIN BOUNDARY FROM 1990 TOPO
121          BA   1.971
122          LG    0.10    0.25    4.00    0.74      25
123          UI       0     258     789    1569    2132    2665    1637    1329    1092     839
124          UI     639     545     386     305     249     198     134     128      88      50
125          UI      50      49      50      50       0       0       0       0       0       0
126          UI       0       0       0       0       0       0       0       0       0       0
127          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  4

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

128          KK  W03W04ROUTE
129          KM        Side slopes and width based on aerial and topo
130          KM        Manning's N Value: natural desert wash w/ vegetation
131          RS       3    FLOW
132          RC   0.035   0.035   0.035   18417  0.0490    0.00
133          RX  100.00  140.00  180.00  210.00  235.00  305.00  345.00  385.00
134          RY  1511.0 1510.50 1510.00 1502.00 1502.10 1510.00 1511.00 1512.00
             *

135          KK     W04BASIN
136          KM        BASIN BOUNDARY FROM 1990 TOPO
137          BA   2.034
138          LG    0.14    0.25    4.60    0.50      26
139          UI       0     249     673    1409    1895    2731    1753    1401    1167     947
140          UI     720     594     480     353     293     233     191     135     121     103
141          UI      48      48      48      48      48      47       0       0       0       0
142          UI       0       0       0       0       0       0       0       0       0       0
143          UI       0       0       0       0       0       0       0       0       0       0
             *

144          KK  DW04REDIVERT
145          KM        Additional Retention based on 100yr 2hr retention.
146          KM        C value is based on future land use, P=2.7, A=acres
147          DT    DW04    22.7     0.0
148          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
149          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

150          KK   CPW04COMBINE
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151          HC       2   4.005
             *

152          KK  W04W05ROUTE
153          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
154          KM        width based on aerial / Manning's N Value: clean straight earth
155          RS       2    FLOW
156          RC   0.035   0.035   0.035    5298  0.0098    0.00
157          RX  100.00  120.00  140.00  160.00  174.00  214.00  234.00  254.00
158          RY  1314.0 1312.50 1312.00 1308.00 1308.10 1312.00 1312.50 1314.00
             *

159          KK     W05BASIN
160          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
161          BA   0.316
162          LG    0.26     0.25     4.25     0.47       14
163          UI       0       46      175      264      380      549      385      273      177       80
164          UI      54       24       15       14        0        0        0        0        0        0
165          UI       0        0        0        0        0        0        0        0        0        0
166          UI       0        0        0        0        0        0        0        0        0        0
167          UI       0        0        0        0        0        0        0        0        0        0
             *
1                                          HEC-1 INPUT                                          PAGE  5

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

168          KK  DW05REDIVERT
169          KM        Additional Retention based on 100yr 2hr retention.
170          KM        C value is based on future land use, P=2.7, A=acres
171          DT    DW05     19.1      0.0
172          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
173          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

174          KK   CPW05COMBINE
175          HC       3   5.793
             *

176          KK  DW05SEDIVERT
177          KM        North Inlet Channel Divert from L303M3LA.OUT model given to HDR by
178          KM        FCDMC 05062009
179          DT   DW05S      0.0      0.0
180          DI   600.0    800.0   1000.0   1200.0   1400.0   1600.0   2000.0   2400.0   2715.0   2800.0
181          DQ   105.0    163.0    361.0    498.0    640.0    792.0   1100.0   1437.0   1605.0   1630.0
             *

182          KK  W0512AROUTE
183          KM        White Tanks FRS#3 North Inlet Channel
184          KM        South Channel plans FCD Contract No 2007C021
185          KM        Cholla Wash
186          RS       2    FLOW
187          RC   0.050   0.030   0.050    5306  0.0083    0.00
188          RX  1010.0 1015.00 1020.00 1050.00 1100.00 1275.00 1580.00 1750.00
189          RY  1251.0 1249.00 1249.00 1245.00 1244.90 1250.00 1250.00 1254.00
             *

190          KK     W06BASIN
191          KM        BASIN BOUNDARY FROM 1990 TOPO
192          BA   0.707
193          LG    0.10     0.25     4.30     0.65       23
194          UI       0      358     1306     1525      879      546      341      206      125       83
195          UI      35       35       36        0        0        0        0        0        0        0
196          UI       0        0        0        0        0        0        0        0        0        0
197          UI       0        0        0        0        0        0        0        0        0        0
198          UI       0        0        0        0        0        0        0        0        0        0
             *

199          KK     W07BASIN
200          KM        BASIN BOUNDARY FROM 1990 TOPO
201          BA   0.312
202          LG    0.10     0.25     4.25     0.60       73
203          UI       0      363     1119      709      177       37        0        0        0        0
204          UI       0        0        0        0        0        0        0        0        0        0
205          UI       0        0        0        0        0        0        0        0        0        0
206          UI       0        0        0        0        0        0        0        0        0        0
207          UI       0        0        0        0        0        0        0        0        0        0
             *
1                                          HEC-1 INPUT                                          PAGE  6

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

208          KK  DW07REDIVERT
209          KM        Additional Retention based on 100yr 2hr retention.
210          KM        C value is based on future land use, P=2.7, A=acres
211          DT    DW07     21.3      0.0
212          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
213          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

214          KK   CPW07COMBINE
215          HC       2   1.019
             *

216          KK  W07W08ROUTE
217          KM        Cross-section: Based on aerial and topo
218          KM        Manning's N Value: Natural Desert wash w/ vegetation
219          KM        N value modified to slow velocity
220          RS       1    FLOW
221          RC   0.045   0.040   0.045    5589  0.0796    0.00
222          RX  100.00  136.00  173.00  197.00  234.00  254.00  298.00  342.00
223          RY  2880.0 2865.00 2850.00 2840.00 2840.00 2850.00 2865.00 2880.00
             *

224          KK     W08BASIN
225          KM        BASIN BOUNDARY FROM 1990 TOPO
226          BA   0.446
227          LG    0.10     0.25     3.95     0.40       25
228          UI       0      581     1457      737      357      174       83       33        0        0
229          UI       0        0        0        0        0        0        0        0        0        0
230          UI       0        0        0        0        0        0        0        0        0        0
231          UI       0        0        0        0        0        0        0        0        0        0
232          UI       0        0        0        0        0        0        0        0        0        0
             *

233          KK   CPW08COMBINE
234          HC       2   1.465
             *
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235          KK     W09BASIN
236          KM        BASIN BOUNDARY FROM 1990 TOPO
237          BA   0.335
238          LG    0.15    0.25    3.95    0.40      25
239          UI       0     380    1177     787     195      41       0       0       0       0
240          UI       0       0       0       0       0       0       0       0       0       0
241          UI       0       0       0       0       0       0       0       0       0       0
242          UI       0       0       0       0       0       0       0       0       0       0
243          UI       0       0       0       0       0       0       0       0       0       0
             *

244          KK  DW09REDIVERT
245          KM        Additional Retention based on 100yr 2hr retention.
246          KM        C value is based on future land use, P=2.7, A=acres
247          DT    DW09     5.6     0.0
248          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
249          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
1                                    HEC-1 INPUT                                          PAGE  7

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

250          KK   CPW09COMBINE
251          HC       2     1.8
             *

252          KK  W09W10ROUTE
253          KM        Cross-section: Based on aerial and topo
254          KM        Manning's N Value: Natural Desert wash w/ vegetation
255          KM        N value modified to slow velocity
256          RS       1    FLOW
257          RC   0.045   0.040   0.045   11134  0.0683    0.00
258          RX  100.00  137.00  172.00  192.00  220.00  230.00  284.00  338.00
259          RY  1990.0 1975.00 1960.00 1950.00 1950.00 1960.00 1975.00 1990.00
             *

260          KK     W10BASIN
261          KM        BASIN BOUNDARY FROM 1990 TOPO
262          BA   1.338
263          LG    0.10    0.25    3.95    0.40      25
264          UI       0     405    1564    2668    1770    1286     859     604     392     269
265          UI     182     136      64      53      53      53       0       0       0       0
266          UI       0       0       0       0       0       0       0       0       0       0
267          UI       0       0       0       0       0       0       0       0       0       0
268          UI       0       0       0       0       0       0       0       0       0       0
             *

269          KK   CPW10COMBINE
270          HC       2   3.138
             *

271          KK     W11BASIN
272          KM        BASIN BOUNDARY FROM 1990 TOPO
273          BA   0.812
274          LG    0.10    0.25    3.95    0.40      25
275          UI       0     285    1067    1713    1051     752     477     333     212     144
276          UI      87      60      34      34      34       0       0       0       0       0
277          UI       0       0       0       0       0       0       0       0       0       0
278          UI       0       0       0       0       0       0       0       0       0       0
279          UI       0       0       0       0       0       0       0       0       0       0
             *

280          KK   CPW11COMBINE
281          HC       2    3.95
             *

282          KK  W11W12ROUTE
283          KM        Cross-section: Based on aerial and topo
284          KM        Manning's N Value: Natural Desert wash w/ vegetation
285          RS       7    FLOW
286          RC   0.045   0.035   0.045   21182  0.0205    0.00
287          RX  100.00  110.30  290.50  304.40  319.20  330.60  344.60  569.70
288          RY  1312.0 1310.00 1308.00 1306.00 1305.90 1308.00 1310.00 1312.00
             *
1                                    HEC-1 INPUT                                          PAGE  8

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

289          KK     W12BASIN
290          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
291          BA   1.868
292          LG    0.18    0.25    4.60    0.45      12
293          UI       0     171     300     686     904    1107    1384    1986    1948    1487
294          UI    1218     990     758     457     299     246     171      98      52      53
295          UI      53      53       0       0       0       0       0       0       0       0
296          UI       0       0       0       0       0       0       0       0       0       0
297          UI       0       0       0       0       0       0       0       0       0       0
             *

298          KK  DW12REDIVERT
299          KM        Additional Retention based on 100yr 2hr retention.
300          KM        C value is based on future land use, P=2.7, A=acres
301          DT    DW12    43.6     0.0
302          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
303          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

304          KK  DW05SERETRIEVE
305          KM        Flow traveling down North Inlet Channel
306          DR   DW05S
             *

307          KK  W0512BROUTE
308          KM        White Tanks FRS#3 North Inlet Channel
309          KM        South Channel plans FCD Contract No 2007C021
310          KM        N value modifeid to mimic slowing of velocity by drop structures
311          RS       2    FLOW
312          RC   0.035   0.035   0.035    5494  0.0170    0.00
313          RX  100.00  120.00  135.00  165.00  220.00  300.00  315.00  379.00
314          RY  1244.7 1239.65 1239.50 1232.00 1231.90 1239.50 1239.65 1255.65
             *

315          KK   CPW12COMBINE
316          HC       4  11.611
             *

317          KK  W12W13ROUTE
318          KM        From NIC South Channel Plans at Sta. 535+00
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```
319          RS       1    FLOW
320          RC   0.032   0.032   0.032    2062  0.0051    0.00
321          RX  100.00  120.00  162.50  205.00  355.00  397.50  440.00  460.00
322          RY  1218.4 1218.18 1211.10 1203.98 1204.45 1211.53 1218.65 1218.85
             *

323          KK     W13BASIN
324          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
325          BA   1.584
326          LG    0.21    0.25    4.90    0.36      14
327          UI       0     167     387     769     980    1263    1831    1902    1426    1111
328          UI     864     585     292     246     170      71      51      52      51       0
329          UI       0       0       0       0       0       0       0       0       0       0
330          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

331          UI       0       0       0       0       0       0       0       0       0       0
             *

332          KK  DW13REDIVERT
333          KM        Additional Retention based on 100yr 2hr retention.
334          KM        C value is based on future land use, P=2.7, A=acres
335          DT    DW13    62.2     0.0
336          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
337          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

338          KK   CPW13COMBINE
339          HC       2  13.195
             *

340          KK  W13W16ROUTE
341          KM        Cross-section: From NIC South
342          KM        Channel Plans at Sta. 523+00
343          RS       2    FLOW
344          RC   0.032   0.032   0.032    6257  0.0051    0.00
345          RX  100.00  115.00  162.00  209.10  359.10  435.90  465.00  480.00
346          RY  1216.9 1216.77 1208.93 1201.09 1203.09 1215.09 1223.54 1223.69
             *

347          KK     W15BASIN
348          KM        BASIN BOUNDARY FROM 1990 TOPO
349          BA   1.227
350          LG    0.26    0.25    4.55    0.40      23
351          UI       0     150     437     764     997    1434    1764    1280     966     697
352          UI     372     255     151      77      46      46      46       0       0       0
353          UI       0       0       0       0       0       0       0       0       0       0
354          UI       0       0       0       0       0       0       0       0       0       0
355          UI       0       0       0       0       0       0       0       0       0       0
             *

356          KK  DW15REDIVERT
357          KM        Additional Retention based on 100yr 2hr retention.
358          KM        C value is based on future land use, P=2.7, A=acres
359          DT    DW15    80.9     0.0
360          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
361          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

362          KK     W14BASIN
363          KM        BASIN BOUNDARY FROM 1990 TOPO
364          BA   1.582
365          LG    0.14    0.25    5.20    0.37      19
366          UI       0     363    1377    2355    2543    1579    1187     811     622     407
367          UI     301     219     141     116      55      55      55      55       0       0
368          UI       0       0       0       0       0       0       0       0       0       0
369          UI       0       0       0       0       0       0       0       0       0       0
370          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

371          KK  DW14REDIVERT
372          KM        Additional Retention based on 100yr 2hr retention.
373          KM        C value is based on future land use, P=2.7, A=acres
374          DT    DW14    18.6     0.0
375          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
376          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

377          KK  W14W15ROUTE
378          KM        Assumed 25' bottom width, 4:1 sideslopes,
379          KM        6' depth; Mannings N Value: 0.035
380          RS       1    FLOW
381          RC   0.035   0.035   0.035    7308  0.0104    0.00
382          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
383          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

384          KK   CPW15COMBINE
385          HC       2   2.809
             *

386          KK  W15W16ROUTE
387          KM        Cross-section: Based on aerial and topo
388          KM        Manning's N Value: Natural Desert wash w/ vegetation
389          RS       2    FLOW
390          RC   0.035   0.035   0.035    2750  0.0087    0.00
391          RX  100.00  135.00  232.00  328.00  360.00  498.00  635.00  735.00
392          RY  1202.0 1200.00 1199.00 1198.00 1197.90 1199.00 1200.00 1202.00
             *

393          KK     W16BASIN
394          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, THE FRS#4 AND 1990 TOPO
395          BA   0.530
396          LG    0.16    0.15    4.55    0.36      15
397          UI       0      89     360     529     855     884     596     390     178     108
398          UI      49      26      26       0       0       0       0       0       0       0
399          UI       0       0       0       0       0       0       0       0       0       0
400          UI       0       0       0       0       0       0       0       0       0       0
401          UI       0       0       0       0       0       0       0       0       0       0
             *

402          KK  DW16REDIVERT
403          KM        Additional Retention based on 100yr 2hr retention.
404          KM        C value is based on future land use, P=2.7, A=acres
```

```
405          DT    DW16     22.6      0.0
406          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
407          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

408          KK   CPW16COMBINE
409          HC       3  16.534
             *

410          KK  W16W20ROUTE
411          KM        Cross-section: Based on aerial and topo
412          KM        Manning's N Value: clean earth; straight
413          RS       1    FLOW
414          RC   0.022    0.022    0.022    3633  0.0130    0.00
415          RX  100.00   113.00   127.00   136.00   245.00   272.00   318.00   384.00
416          RY  1186.0 1184.00 1182.00 1180.00 1179.90 1182.00 1184.00 1186.00
             *

417          KK     W18BASIN
418          KM        BASIN BOUNDARY FROM 1990 TOPO
419          BA   1.260
420          LG    0.24     0.25     4.40     0.45       23
421          UI       0       48       50       48       48      161      181      213      240      265
422          UI     280      308      335      365      407      476      568      653      565      493
423          UI     457      411      382      354      314      288      265      238      217      179
424          UI     139       97       87       82       80       78       48       49       49       45
425          UI      15       15       15       15       15       15       15       15       15       15
             *

426          KK  DW18REDIVERT
427          KM        Additional Retention based on 100yr 2hr retention.
428          KM        C value is based on future land use, P=2.7, A=acres
429          DT    DW18     55.7      0.0
430          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
431          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

432          KK     W17BASIN
433          KM        BASIN BOUNDARY FROM 1990 TOPO
434          BA   1.497
435          LG    0.28     0.25     4.30     0.43       23
436          UI       0      290     1084     1617     2673     2405     1592      995      434      262
437          UI      83       77       76        0        0        0        0        0        0        0
438          UI       0        0        0        0        0        0        0        0        0        0
439          UI       0        0        0        0        0        0        0        0        0        0
440          UI       0        0        0        0        0        0        0        0        0        0
             *

441          KK  DW17REDIVERT
442          KM        Additional Retention based on 100yr 2hr retention.
443          KM        C value is based on future land use, P=2.7, A=acres
444          DT    DW17     82.9      0.0
445          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
446          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

447          KK  W17W18ROUTE
448          KM        Assumed 25' bottom width, 4:1 sideslopes,
449          KM        6' depth; Mannings N Value: 0.035
450          RS       3    FLOW
451          RC   0.035    0.035    0.035     8559  0.0257    0.00
452          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
453          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
             *

454          KK   CPW18COMBINE
455          HC       2   2.757
             *

456          KK  W18W20ROUTE
457          KM        Assumed 25' bottom width, 4:1 sideslopes,
458          KM        6' depth; Mannings N Value: 0.035
459          RS       4    FLOW
460          RC   0.035    0.035    0.035     6914  0.0058    0.00
461          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
462          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
             *

463          KK     W19BASIN
464          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
465          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
466          BA   1.158
467          LG    0.17     0.25     3.88     0.42       29
468          UI       0      443     1418     2551     2314     1345      512      224       81       79
469          UI       0        0        0        0        0        0        0        0        0        0
470          UI       0        0        0        0        0        0        0        0        0        0
471          UI       0        0        0        0        0        0        0        0        0        0
472          UI       0        0        0        0        0        0        0        0        0        0
             *

473          KK  DW19REDIVERT
474          KM        Additional Retention based on 100yr 2hr retention.
475          KM        C value is based on future land use, P=2.7, A=acres
476          DT    DW19     29.1      0.0
477          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
478          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

479          KK   SRW19STORAGE
480          KM        Master Drainage Plan for the Caterpillar Property (Basin #16)
481          KO
482          RS       1    STOR
483          SV            1.00    31.00   114.00   270.00   502.00   807.00  1319.00  1388.00  1460.00
484          SQ                                                                                   135.00
485          SE  1198.0 1200.00 1210.00 1220.00 1230.00 1240.00 1250.00 1260.00 1261.00 1262.00
486          ST
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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487          KK  W19W20ROUTE
488          KM        Estimated 4' deep and 3:1 side slopes, width based
489          KM        on aerial / Manning's N Value: earth with sparse treese and shrubs
490          RS       1    FLOW
491          RC   0.032   0.032   0.032    3790  0.0158    0.00
492          RX  100.00  120.00  140.00  152.00  158.00  170.00  190.00  210.00
493          RY  1240.5 1240.25 1240.00 1236.00 1236.00 1240.00 1240.25 1240.50
             *

494          KK     W20BASIN
495          KM        BASIN BOUNDARY FROM WHITE TANKS #4 FRS, S-S-D CURVES
496          KM        FROM JAN 2009 FCDMC, AND FROM 1990 TOPO
497          BA   1.137
498          LG    0.22    0.21    4.10    0.51      19
499          UI       0     151     497     808    1082    1732    1497    1101     808     472
500          UI     257     170      83      47      46      46       0       0       0       0
501          UI       0       0       0       0       0       0       0       0       0       0
502          UI       0       0       0       0       0       0       0       0       0       0
503          UI       0       0       0       0       0       0       0       0       0       0
             *

504          KK   CPW20COMBINE
505          HC       4  21.586
             *

506          KK   SRW20STORAGE
507          KM        White Tanks FRS #3 from FCDMC 1/8/2009
508          KO
509          RS       1    STOR
510          SV          135.00  385.00  810.00 1600.00 2200.00 2560.00 3175.00 4300.00 5500.00
511          SQ                                                  68.00 1343.0016310.0045000.00
512          SE  1196.0 1196.30 1199.00 1201.00 1206.00 1208.60 1210.00 1212.00 1215.00 1218.00
513          ST
             *

514          KK    W21ABASIN
515          KM        Boundary based on Preliminary Design Plans for
516          KM        White Tanks FRS #3 Outfall Channel dated
517          KM        12-08-2008 prepared by Gannett Fleming
518          BA   0.199
519          LG    0.22    0.25    4.35    0.49      44
520          UI       0      39     144     218     360     318     211     129      57      34
521          UI      10      11      10       0       0       0       0       0       0       0
522          UI       0       0       0       0       0       0       0       0       0       0
523          UI       0       0       0       0       0       0       0       0       0       0
524          UI       0       0       0       0       0       0       0       0       0       0
             *

525          KK  DW21ARDIVERT
526          KM        Additional Retention based on 100yr 2hr retention.
527          KM        C value is based on future land use, P=2.7, A=acres
528          DT   DW21A    17.0     0.0
529          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
530          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

531          KK  CPW21ACOMBINE
532          HC       2   0.199
             *

533          KK  21A28AROUTE
534          KM        Cross-section: Preliminary Design Plans for White Tanks
535          KM        FRS #3 Outfall Channel FCD Contract No 2004C019 Dec 08,2008
536          RS       6    FLOW
537          RC   0.045   0.035   0.045    3583  0.0013    0.00
538          RX  100.00  137.50  145.50  151.50  156.50  162.50  170.50  208.00
539          RY  1190.0 1180.62 1180.62 1178.62 1178.62 1180.62 1180.62 1190.00
             *

540          KK    W28ABASIN
541          KM        Boundary based on Preliminary Design Plans
542          KM        for White Tanks FRS #3 Outfall Channel dated
543          KM        12-08-2008 prepared by Gannett Fleming
544          BA   0.642
545          LG    0.26    0.25    4.55    0.39      19
546          UI       0      91     338     519     731    1094     790     575     386     178
547          UI     119      64      28      28      29       0       0       0       0       0
548          UI       0       0       0       0       0       0       0       0       0       0
549          UI       0       0       0       0       0       0       0       0       0       0
550          UI       0       0       0       0       0       0       0       0       0       0
             *

551          KK  DW28ARDIVERT
552          KM        Additional Retention based on 100yr 2hr retention.
553          KM        C value is based on future land use, P=2.7, A=acres
554          DT   DW28A    32.1     0.0
555          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
556          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

557          KK  CPW28ACOMBINE
558          HC       2   0.841
             *

559          KK  W28A33ROUTE
560          KM        Cross-section: Cross-section determined from Preliminary
561          KM        Design Plans for White Tanks FRS #3 Outfall Channel FCD
562          KM        Contract No 2004C019 dated 12-8-08 by Gannett Fleming
563          RS       4    FLOW
564          RC   0.045   0.035   0.045    4333  0.0020    0.00
565          RX  100.00  137.50  145.50  151.50  156.50  162.50  170.50  208.00
566          RY  1180.0 1170.62 1170.62 1168.62 1168.62 1170.62 1170.62 1180.00
             *

567          KK     W33BASIN
568          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
569          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
570          BA   0.839
571          LG    0.30    0.25    4.00    0.49       7
572          UI       0     100     281     502     641     929    1185     890     684     506
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

573          UI     295     173     120      73      31      30      31       0       0       0
574          UI       0       0       0       0       0       0       0       0       0       0
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575          UI       0       0       0       0       0       0       0       0       0       0
576          UI       0       0       0       0       0       0       0       0       0       0
             *

577          KK  DW33REDIVERT
578          KM        Additional Retention based on 100yr 2hr retention.
579          KM        C value is based on future land use, P=2.7, A=acres
580          DT    DW33    13.2     0.0
581          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
582          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

583          KK   CPW33COMBINE
584          HC       2    1.68
             *

585          KK  W33W35ROUTE
586          KM        Cross-section: Cross-section determined from Preliminary
587          KM        Design Plans for White Tanks FRS #3 Outfall Channel FCD
588          KM        Contract No 2004C019 dated 12-8-08 by Gannett Fleming
589          RS       2    FLOW
590          RC   0.045   0.035   0.045    2658  0.0013    0.00
591          RX  100.00  137.50  145.50  151.50  156.50  162.50  170.50  208.00
592          RY  1160.0 1150.62 1150.62 1148.62 1148.62 1150.62 1150.62 1160.00
             *

593          KK     W35BASIN
594          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
595          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
596          BA   0.283
597          LG    0.28    0.26    3.71    0.47      16
598          UI       0      50     195     289     467     467     315     203      92      56
599          UI      24      14      14       0       0       0       0       0       0       0
600          UI       0       0       0       0       0       0       0       0       0       0
601          UI       0       0       0       0       0       0       0       0       0       0
602          UI       0       0       0       0       0       0       0       0       0       0
             *

603          KK  DW35REDIVERT
604          KM        Additional Retention based on 100yr 2hr retention.
605          KM        C value is based on future land use, P=2.7, A=acres
606          DT    DW35    19.2     0.0
607          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
608          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

609          KK     W34BASIN
610          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
611          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
612          BA   0.228
613          LG    0.18    0.26    3.74    0.46      41
614          UI       0     104     320     579     420     215      78      27      17       0
615          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

616          UI       0       0       0       0       0       0       0       0       0       0
617          UI       0       0       0       0       0       0       0       0       0       0
618          UI       0       0       0       0       0       0       0       0       0       0
             *

619          KK  DW34REDIVERT
620          KM        Additional Retention based on 100yr 2hr retention.
621          KM        C value is based on future land use, P=2.7, A=acres
622          DT    DW34    17.5     0.0
623          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
624          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

625          KK   SRW34STORAGE
626          KM        Master Drainage Plan for the Caterpillar Property (Basin #29)
627          KO
628          RS       1    STOR
629          SV            0.99   12.73   23.45   36.25   50.68   54.76   59.33   83.20
630          SQ                                                            88.00 6226.00
631          SE  1164.5 1166.00 1170.00 1172.00 1174.00 1176.00 1177.50 1178.00 1180.00
632          ST
             *

633          KK  W34W35ROUTE
634          KM        Estimated 3' deep and 4:1 side slopes, width based on aerial
635          KM        Manning's N Value: clean straight earth
636          RS       1    FLOW
637          RC   0.022   0.022   0.022     813  0.0111    0.00
638          RX  100.00  104.00  108.00  120.00  132.00  144.00  152.00  160.00
639          RY  1166.2 1166.10 1166.00 1160.00 1160.10 1162.00 1162.10 1162.20
             *

640          KK   CPW35COMBINE
641          HC       3   2.191
             *

642          KK  W3536AROUTE
643          KM        Cross-section: Cross-section determined from Preliminary
644          KM        Design Plans for White Tanks FRS #3 Outfall Channel FCD
645          KM        Contract No 2004C019 dated 12-8-08 by Gannett Fleming
646          RS       1    FLOW
647          RC   0.045   0.035   0.045     754  0.0020    0.00
648          RX  100.00  137.50  145.50  155.50  156.50  162.50  170.50  198.60
649          RY  1150.0 1140.62 1140.62 1138.62 1138.62 1140.62 1140.62 1150.00
             *

650          KK  W3536BROUTE
651          KM        Cross-section: Cross-section determined from Preliminary
652          KM        Design Plans for White Tanks FRS #3 Outfall Channel FCD
653          KM        Contract No 2004C019 dated 12-8-08 by Gannett Fleming
654          RS       2    FLOW
655          RC   0.045   0.045   0.045    2200  0.0015    0.00
656          RX  100.00  111.00  123.00  135.00  185.00  197.00  209.00  229.00
657          RY  1140.1 1140.00 1137.00 1134.00 1133.90 1137.00 1140.00 1140.20
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

658          KK  W3536CROUTE
659          KM        Cross-section: Cross-section determined from Preliminary
660          KM        Design Plans for White Tanks FRS #3 Outfall Channel FCD
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661          KM        Contract No 2004C019 dated 12-8-08 by Gannett Fleming
662          RS        3    FLOW
663          RC   0.045   0.035   0.045    2238  0.0020    0.00
664          RX  100.00  137.50  145.50  155.50  156.50  162.50  170.50  198.60
665          RY  1130.0 1120.62 1120.62 1118.62 1118.62 1120.62 1120.62 1130.00
             *

666          KK     W36BASIN
667          KM        Boundary based on Aerial, topo, and Preliminary Design
668          KM        Plans for White Tanks FRS #3 Outfall Channel dated
669          KM        12-08-2008 prepared by Gannett Fleming
670          BA   0.720
671          LG   0.29    0.25    4.00    0.50       9
672          UI      0      74     163     330     426     540     753     883     667     524
673          UI    405     297     157     124      78      53      22      24      22      23
674          UI      0       0       0       0       0       0       0       0       0       0
675          UI      0       0       0       0       0       0       0       0       0       0
676          UI      0       0       0       0       0       0       0       0       0       0
             *

677          KK  DW36REDIVERT
678          KM        PASQUELETTI MOUNTAIN RANCH for areas outside Ph1 that have homes
679          DT    RW36    29.7     0.0
680          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
681          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

682          KK   CPW36COMBINE
683          HC       2   2.911
             *

684          KK  W36W37ROUTE
685          KM        Cross-section: Cross-section determined from Preliminary
686          KM        Design Plans for White Tanks FRS #3 Outfall Channel FCD
687          KM        Contract No 2004C019 dated 12-8-08 by Gannett Fleming
688          RS       4    FLOW
689          RC   0.045   0.035   0.045    5356  0.0020    0.00
690          RX  100.00  137.50  145.50  155.50  156.50  162.50  170.50  198.60
691          RY  1100.0 1090.62 1090.62 1088.62 1088.62 1090.62 1090.62 1100.00
             *

692          KK     W37BASIN
693          KM        WESTERN LIMIT DEFINED BY JACKRABBIT WASH
694          KM        CAPACITY APPROX 12,000 CFS, VALENCIA HEIGHTS
695          BA   1.210
696          LG   0.28    0.25    4.20    0.48      19
697          UI      0     126     284     568     729     930    1319    1479    1112     865
698          UI    667     476     250     199     129      73      39      39      39      38
699          UI      0       0       0       0       0       0       0       0       0       0
700          UI      0       0       0       0       0       0       0       0       0       0
701          UI      0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

702          KK  DW37REDIVERT
703          KM        Additional Retention based on 100yr 2hr retention.
704          KM        C value is based on future land use, P=2.7, A=acres
705          DT    DW37    53.9     0.0
706          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
707          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

708          KK     W22BASIN
709          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
710          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
711          BA   0.782
712          LG   0.16    0.25    4.15    0.63      26
713          UI      0     337    1056    1925    1473     792     279     107      57       0
714          UI      0       0       0       0       0       0       0       0       0       0
715          UI      0       0       0       0       0       0       0       0       0       0
716          UI      0       0       0       0       0       0       0       0       0       0
717          UI      0       0       0       0       0       0       0       0       0       0
             *

718          KK  DW22REDIVERT
719          KM        Additional Retention based on 100yr 2hr retention.
720          KM        C value is based on future land use, P=2.7, A=acres
721          DT    DW22    17.3     0.0
722          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
723          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

724          KK  W22W23ROUTE
725          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
726          KM        6' depth; Mannings N Value: 0.035
727          RS       1    FLOW
728          RC   0.035   0.035   0.035    4866  0.0719    0.00
729          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
730          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

731          KK     W23BASIN
732          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
733          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
734          BA   0.897
735          LG   0.19    0.25    4.35    0.54      26
736          UI      0     371    1157    2140    1719     967     344     139      63       0
737          UI      0       0       0       0       0       0       0       0       0       0
738          UI      0       0       0       0       0       0       0       0       0       0
739          UI      0       0       0       0       0       0       0       0       0       0
740          UI      0       0       0       0       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

741          KK  DW23REDIVERT
742          KM        Additional Retention based on 100yr 2hr retention.
743          KM        C value is based on future land use, P=2.7, A=acres
744          DT    DW23    26.5     0.0
745          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
746          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

747          KK   CPW23COMBINE
748          HC       2   1.679
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KK  W23W24ROUTE
KM        Assumed 25' bottom width, 4:1 sideslopes,
KM        6' depth; Mannings N Value: 0.035
RS       1    FLOW
RC   0.035   0.035   0.035    5335  0.0367    0.00
RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
*

KK     W24BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   0.475
LG    0.17    0.25    4.90    0.41      23
UI       0     136     460     728    1030     662     372     152      74      28
UI      28       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DW24REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    DW24    16.3     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPW24COMBINE
HC       2   2.154
*

KK  W24W27ROUTE
KM        Cross-section: Based on aerial and topo
KM        Manning's N Value: natural desert wash w/ vegetation
RS       2    FLOW
RC   0.035   0.035   0.035    5873  0.0289    0.00
RX  100.00  120.00  140.00  160.00  180.00  200.00  220.00  240.00
RY  1094.0 1092.00 1090.00 1084.00 1084.10 1090.00 1090.25 1090.50
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     W25BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   1.099
LG    0.11    0.25    4.80    0.47      21
UI       0     150     523     825    1123    1784    1397    1036     740     374
UI     238     150      46      46      47       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DW25REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    DW25     4.2     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   SRW25STORAGE
KM        Verrado on-line storage basin (WoodPatel ID SR20)
KO
RS       1    STOR
SV            1.05    9.43   26.91   54.31   92.89  138.67  176.47  190.08  219.05
SQ                                                                   265.00 1377.00
SE  1443.0 1446.00 1450.00 1454.00 1458.00 1462.00 1466.00 1469.00 1470.00 1472.00
ST
*

KK  W25W26ROUTE
KM        Cross-section: Based on aerial and topo
KM        Manning's N Value: natural desert wash w/ vegetation
RS       1    FLOW
RC   0.035   0.035   0.035    6978  0.0178    0.00
RX  100.00  120.00  140.00  156.00  176.00  192.00  212.00  232.00
RY  1451.5 1451.25 1451.00 1447.00 1447.10 1451.00 1451.25 1451.50
*

KK     W26BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   0.682
LG    0.19    0.23    6.20    0.24      20
UI       0     128     485     722    1185    1113     733     466     205     125
UI      44      35      34       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  DW26REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    DW26    21.3     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPW26COMBINE
HC       2   1.781
*

KK   SRW26STORAGE
KM        Verrado on-line storage basin (WoodPatel ID SR21 and PH 6 Golf)
KO
RS       1    STOR
SV            0.68   20.68   57.58   95.91  102.34  117.65  130.00
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835          SQ                                          265.00 1377.00 2000.00
836          SE  1319.0 1320.00 1330.00 1340.00 1347.00 1348.00 1350.00 1351.00
837          ST
             *

838          KK  W26W27ROUTE
839          KM        Assumed 25' bottom width, 4:1 sideslopes,
840          KM        6' depth; Mannings N Value: 0.035
841          RS       1    FLOW
842          RC   0.035   0.035   0.035    3484  0.0172    0.00
843          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
844          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

845          KK     W27BASIN
846          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
847          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
848          BA   0.411
849          LG    0.21    0.25    5.80    0.26      19
850          UI       0     208     638    1106     728     318     123      32       0       0
851          UI       0       0       0       0       0       0       0       0       0       0
852          UI       0       0       0       0       0       0       0       0       0       0
853          UI       0       0       0       0       0       0       0       0       0       0
854          UI       0       0       0       0       0       0       0       0       0       0
             *

855          KK  DW27REDIVERT
856          KM        Additional Retention based on 100yr 2hr retention.
857          KM        C value is based on future land use, P=2.7, A=acres
858          DT    DW27    19.2     0.0
859          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
860          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

861          KK   CPW27COMBINE
862          HC       3   4.346
             *

863          KK  W27W44ROUTE
864          KM        Assumed 25' bottom width, 4:1 sideslopes,
865          KM        6' depth; Mannings N Value: 0.035
866          RS       2    FLOW
867          RC   0.035   0.035   0.035    7169  0.0098    0.00
868          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
869          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

870          KK     W43BASIN
871          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
872          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
873          BA   0.209
874          LG    0.15    0.26    3.48    0.55      35
875          UI       0     664     854      91       0       0       0       0       0       0
876          UI       0       0       0       0       0       0       0       0       0       0
877          UI       0       0       0       0       0       0       0       0       0       0
878          UI       0       0       0       0       0       0       0       0       0       0
879          UI       0       0       0       0       0       0       0       0       0       0
             *

880          KK  DW43REDIVERT
881          KM        Additional Retention based on 100yr 2hr retention.
882          KM        C value is based on future land use, P=2.7, A=acres
883          DT    DW43     6.7     0.0
884          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
885          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

886          KK   SRW43STORAGE
887          KM        Verrado on-line storage basin (WLB) (WoodPatel ID SR23)
888          KO
889          RS       1    STOR
890          SV            6.04   20.38   53.82  120.38  216.24  325.98  455.42  606.10  645.49
891          SQ
892          SE  1272.0 1276.00 1280.00 1284.00 1288.00 1292.00 1296.00 1300.00 1304.00 1305.00
893          ST
             *

894          KK  W43W44ROUTE
895          KM        Cross-section: Side slopes and width based on aerial and topo
896          KM        Manning's N Value: natural desert wash w/ vegetation
897          RS       1    FLOW
898          RC   0.035   0.035   0.035    8415  0.0125    0.00
899          RX  100.00  145.00  180.00  210.00  220.00  245.00  270.00  295.00
900          RY  1266.0 1264.00 1262.00 1258.00 1258.00 1262.00 1265.50 1266.00
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

901          KK     W44BASIN
902          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
903          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
904          BA   0.598
905          LG    0.25    0.25    4.90    0.36      18
906          UI       0      86     320     492     689    1027     741     525     350     161
907          UI     107      54      27      26       0       0       0       0       0       0
908          UI       0       0       0       0       0       0       0       0       0       0
909          UI       0       0       0       0       0       0       0       0       0       0
910          UI       0       0       0       0       0       0       0       0       0       0
             *

911          KK  DW44REDIVERT
912          KM        Additional Retention based on 100yr 2hr retention.
913          KM        C value is based on future land use, P=2.7, A=acres
914          DT    DW44    37.1     0.0
915          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
916          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

917          KK   CPW44COMBINE
918          HC       3   5.153
             *

919          KK  W44W46ROUTE
920          KM        Estimated 2' deep, side slopes and width based on aerial and topo
```

```
 921          KM        Manning's N Value: earth w/ sparse trees and shrubs
 922          RS       1    FLOW
 923          RC   0.032   0.032   0.032    1706  0.0070    0.00
 924          RX  100.00  116.00  132.00  162.00  192.00  252.00  272.00  292.00
 925          RY  1216.0 1215.00 1214.00 1208.00 1208.10 1210.00 1211.00 1212.00
              *

 926          KK     W45BASIN
 927          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 928          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 929          BA   1.035
 930          LG    0.20    0.15    7.30    0.15      17
 931          UI       0     187     732    1085    1790    1688    1122     710     319     193
 932          UI      72      53      52       0       0       0       0       0       0       0
 933          UI       0       0       0       0       0       0       0       0       0       0
 934          UI       0       0       0       0       0       0       0       0       0       0
 935          UI       0       0       0       0       0       0       0       0       0       0
              *

 936          KK  DW45REDIVERT
 937          KM        Additional Retention based on 100yr 2hr retention.
 938          KM        C value is based on future land use, P=2.7, A=acres
 939          DT    DW45    38.5     0.0
 940          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 941          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 942          KK  W45W46ROUTE
 943          KM        Based on aerial and topo
 944          KM        Manning's N Value: natural desert wash w/ vegetation
 945          RS       4    FLOW
 946          RC   0.035   0.035   0.035    9372  0.0125    0.00
 947          RX  100.00  160.00  205.00  265.00  285.00  310.00  345.00  385.00
 948          RY  1274.0 1270.00 1268.00 1262.00 1262.10 1272.00 1275.50 1276.00
              *

 949          KK     W46BASIN
 950          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 951          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 952          BA   0.926
 953          LG    0.24    0.21    6.40    0.20      22
 954          UI       0     108     292     533     683     940    1316     994     775     574
 955          UI     382     189     146      99      34      33      33      34       0       0
 956          UI       0       0       0       0       0       0       0       0       0       0
 957          UI       0       0       0       0       0       0       0       0       0       0
 958          UI       0       0       0       0       0       0       0       0       0       0
              *

 959          KK  DW46RBDIVERT
 960          KM        Additional Retention based on 100yr 2hr retention.
 961          KM        C value is based on future land use, P=2.7, A=acres
 962          DT    RW46    59.4     0.0
 963          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 964          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 965          KK  CPW46ACOMBINE
 966          HC       2   1.961
              *

 967          KK  DW46REDIVERT
 968          KM        Master Drainage Plan for the Caterpillar Property (Basin #27)
 969          DT   RW46R     0.0     0.0
 970          DI     0.0    35.0    98.0   179.0   276.0   520.0   888.0  1339.0  1859.0  2439.0
 971          DQ     0.0     0.0     0.0     0.0     0.0   135.0   382.0   701.0  1080.0  1509.0
              *

 972          KK  CPW46BCOMBINE
 973          HC       2   7.114
              *

 974          KK  W46W54ROUTE
 975          KM        Cross-section: side slopes, width based on aerial and topo
 976          KM        Manning's N Value: natural desert wash w/ vegetation
 977          RS       1    FLOW
 978          RC   0.035   0.035   0.035    3908  0.0397    0.00
 979          RX  100.00  112.00  124.00  140.00  160.00  190.00  220.00  240.00
 980          RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 981          KK     W47BASIN
 982          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 983          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 984          BA   0.666
 985          LG    0.11    0.25    3.95    0.40      25
 986          UI       0      98     363     665     981     752     539     428     331     240
 987          UI     194     139     109      78      60      48      36      19      19      19
 988          UI      19      19       0       0       0       0       0       0       0       0
 989          UI       0       0       0       0       0       0       0       0       0       0
 990          UI       0       0       0       0       0       0       0       0       0       0
              *

 991          KK  DW47REDIVERT
 992          KM        Additional Retention based on 100yr 2hr retention.
 993          KM        C value is based on future land use, P=2.7, A=acres
 994          DT    DW47     2.7     0.0
 995          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 996          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 997          KK     W48BASIN
 998          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 999          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1000          BA   0.353
1001          LG    0.10    0.25    3.95    0.40      25
1002          UI       0      57     232     395     573     367     281     216     157     124
1003          UI      85      65      48      36      28      20      10      11      11      11
1004          UI       0       0       0       0       0       0       0       0       0       0
1005          UI       0       0       0       0       0       0       0       0       0       0
1006          UI       0       0       0       0       0       0       0       0       0       0
              *
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1007        KK   CPW47COMBINE
1008        HC       2   1.019
            *

1009        KK  W47W49ROUTE
1010        KM        Cross-section: Based on aerial and topo
1011        KM        Manning's N Value: natural desert wash w/ vegetation
1012        RS       1    FLOW
1013        RC   0.035   0.035   0.035    5077  0.0414    0.00
1014        RX  100.00  150.00  190.00  210.00  235.00  255.00  275.00  310.00
1015        RY  1740.0 1720.00 1710.00 1707.00 1708.00 1714.00 1730.00 1740.00
            *

1016        KK     W50BASIN
1017        KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1018        KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1019        BA   1.345
1020        LG    0.11    0.25    4.25    0.65      24
1021        UI       0     127     235     523     682     845    1065    1542    1349    1050
1022        UI     851     688     492     277     215     149     120      39      39      39
1023        UI      40      39       0       0       0       0       0       0       0       0
1024        UI       0       0       0       0       0       0       0       0       0       0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1025        UI       0       0       0       0       0       0       0       0       0       0
            *

1026        KK  DW50REDIVERT
1027        KM        Additional Retention based on 100yr 2hr retention.
1028        KM        C value is based on future land use, P=2.7, A=acres
1029        DT    DW50     4.0     0.0
1030        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1031        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1032        KK     W49BASIN
1033        KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1034        KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1035        BA   0.385
1036        LG    0.14    0.25    3.95    0.40      27
1037        UI       0      90     318     486     793     574     372     171      93      38
1038        UI      21      21       0       0       0       0       0       0       0       0
1039        UI       0       0       0       0       0       0       0       0       0       0
1040        UI       0       0       0       0       0       0       0       0       0       0
1041        UI       0       0       0       0       0       0       0       0       0       0
            *

1042        KK  DW49REDIVERT
1043        KM        Additional Retention based on 100yr 2hr retention.
1044        KM        C value is based on future land use, P=2.7, A=acres
1045        DT    DW49     5.5     0.0
1046        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1047        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1048        KK   CPW49COMBINE
1049        HC       3   2.749
            *

1050        KK  W49W51ROUTE
1051        KM        Assumed 25' bottom width, 4:1 sideslopes,
1052        KM        6' depth; Mannings N Value: 0.035
1053        RS       1    FLOW
1054        RC   0.035   0.035   0.035    5726  0.0253    0.00
1055        RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1056        RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
            *

1057        KK     W51BASIN
1058        KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1059        KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1060        BA   0.149
1061        LG    0.21    0.25    3.85    0.43      15
1062        UI       0      52     170     298     308     185      79      38      11       9
1063        UI       0       0       0       0       0       0       0       0       0       0
1064        UI       0       0       0       0       0       0       0       0       0       0
1065        UI       0       0       0       0       0       0       0       0       0       0
1066        UI       0       0       0       0       0       0       0       0       0       0
            *
```



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

1067        KK  DW51REDIVERT
1068        KM        Additional Retention based on 100yr 2hr retention.
1069        KM        C value is based on future land use, P=2.7, A=acres
1070        DT    DW51     4.4     0.0
1071        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1072        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1073        KK   CPW51COMBINE
1074        HC       2   2.898
            *

1075        KK     W52BASIN
1076        KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1077        KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1078        BA   1.123
1079        LG    0.13    0.25    4.40    0.59      23
1080        UI       0     120     284     549     709     910    1351    1322    1016     774
1081        UI     605     381     209     167     122      39      37      37      36       0
1082        UI       0       0       0       0       0       0       0       0       0       0
1083        UI       0       0       0       0       0       0       0       0       0       0
1084        UI       0       0       0       0       0       0       0       0       0       0
            *

1085        KK  DW52REDIVERT
1086        KM        Additional Retention based on 100yr 2hr retention.
1087        KM        C value is based on future land use, P=2.7, A=acres
1088        DT    DW52     9.8     0.0
1089        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1090        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1091        KK   CPW52COMBINE
1092        HC       2   4.021
```

```
                *
1093            KK  W52W53ROUTE
1094            KM        Cross-section: side slopes, width based on aerial and topo
1095            KM        Manning's N Value: natural desert wash w/ vegetation
1096            RS       2    FLOW
1097            RC  1348.0   0.035   0.035    4917  0.0112    0.00
1098            RX  100.00  185.20  223.50  275.50  323.90  343.70  363.80  523.10
1099            RY  1348.0 1346.00 1344.00 1338.00 1337.50 1340.00 1342.00 1346.00
                *

1100            KK     W53BASIN
1101            KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1102            KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1103            BA   0.568
1104            LG    0.20    0.25    4.45    0.51      18
1105            UI       0     420    1295    1653     723     222      53       0       0       0
1106            UI       0       0       0       0       0       0       0       0       0       0
1107            UI       0       0       0       0       0       0       0       0       0       0
1108            UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 28

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

1109            UI       0       0       0       0       0       0       0       0       0       0
                *

1110            KK  DW53RBDIVERT
1111            KM        Additional Retention based on 100yr 2hr retention.
1112            KM        C value is based on future land use, P=2.7, A=acres
1113            DT   DW53B    20.0     0.0
1114            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1115            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1116            KK   CPW53COMBINE
1117            HC       2   4.589
                *

1118            KK  DW53REDIVERT
1119            KM        Verrado - Planning Unti Drainage Plan for Portions of Planning Unit V
1120            KM        (2nd Submittal) (ESTIMATED FROM GOLF BASINS IN REPORT)
1121            DT    RW53     0.0     0.0
1122            DI     0.0  1000.0  1500.0  2000.0  2500.0  3000.0  3500.0  4000.0  4145.0  4500.0
1123            DQ     0.0    10.0   115.0   290.0   460.0   715.0   980.0  1100.0  1145.0  1260.0
                *

1124            KK  W53W54ROUTE
1125            KM        Cross-section: side slopes, width based on aerial and topo
1126            KM        Manning's N Value: natural desert wash w/ vegetation
1127            RS       2    FLOW
1128            RC   0.035   0.035   0.035    9900  0.0157    0.00
1129            RX  100.00  124.00  144.00  150.00  160.00  190.00  220.00  240.00
1130            RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
                *

1131            KK     W54BASIN
1132            KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1133            KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1134            BA   0.980
1135            LG    0.22    0.25    4.50    0.47      16
1136            UI       0     116     317     573     745    1032    1398    1038     810     599
1137            UI     374     202     147      95      36      35      36      36       0       0
1138            UI       0       0       0       0       0       0       0       0       0       0
1139            UI       0       0       0       0       0       0       0       0       0       0
1140            UI       0       0       0       0       0       0       0       0       0       0
                *

1141            KK  DW54REDIVERT
1142            KM        Additional Retention based on 100yr 2hr retention.
1143            KM        C value is based on future land use, P=2.7, A=acres
1144            DT    DW54    47.6     0.0
1145            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1146            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                          HEC-1 INPUT                                          PAGE 29

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

1147            KK   CPW54COMBINE
1148            HC       3  12.683
                *

1149            KK  W54W57ROUTE
1150            KM        Cross-section: side slopes and width based on aerial
1151            KM        Manning's N Value: natural desert wash w/ vegetation
1152            RS       1    FLOW
1153            RC   0.035   0.035   0.035    5173  0.0151    0.00
1154            RX  100.00  124.00  144.00  156.00  180.00  204.00  216.00  228.00
1155            RY  1126.0 1125.00 1124.00 1114.00 1114.10 1117.00 1117.50 1118.00
                *

1156            KK     W56BASIN
1157            KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1158            KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1159            BA   0.448
1160            LG    0.23    0.25    4.20    0.53      36
1161            UI       0     167     535     963     902     532     209      97      30      30
1162            UI       0       0       0       0       0       0       0       0       0       0
1163            UI       0       0       0       0       0       0       0       0       0       0
1164            UI       0       0       0       0       0       0       0       0       0       0
1165            UI       0       0       0       0       0       0       0       0       0       0
                *

1166            KK  DW56REDIVERT
1167            KM        Sienna Hills (aka Tesota Hills) Preliminary Drainage Report
1168            DT    RW56    69.5     0.0
1169            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1170            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1171            KK  W56W57ROUTE
1172            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
1173            KM        based on aerial / Manning's N Value: clean straight earth
1174            RS       1    FLOW
1175            RC   0.022   0.022   0.022    4948  0.0038    0.00
1176            RX  100.00  108.00  116.00  128.00  131.00  143.00  153.00  163.00
1177            RY  1108.5 1108.25 1108.00 1105.00 1105.10 1108.00 1108.25 1108.50
                *
```

```
KK     W55BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   0.496
LG    0.21     0.25     4.00     0.62       27
UI       0      126      438      676     1043      726      448      190      108       35
UI      28        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  DW55RBDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    DW55     21.3      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK  DW55REDIVERT
KM        Verado GOB5
DT   DW55S      0.0      0.0
DI     0.0     55.0    101.0    537.0   1297.0   2269.0   4708.0   7684.0  11074.0      0.0
DQ     0.0      0.0      0.0    382.0   1080.0   1984.0   4269.0   7072.0  10310.0      0.0
*

KK  W55W57ROUTE
KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
KM        based on aerial / Manning's N Value: natural desert wash w/ vegetation
RS       5     FLOW
RC   0.035    0.035    0.035     5747   0.0096     0.00
RX  100.00   110.00   120.00   136.00   156.00   172.00   192.00   212.00
RY  1136.5 1136.25 1136.00 1134.00 1134.10 1136.00 1136.25 1136.50
*

KK     W57BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL, 2006 MODIFIED SLIGHTLY TO MATCH NEW TOPO
BA   1.161
LG    0.20     0.26     4.65     0.41       33
UI       0      187      748     1118     1723     1996     1331      903      437      256
UI     133       57       55        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  DW57REDIVERT
KM        Master Drainage Plan for the Caterpillar Property (Basin #42)
DT    RW57    106.9      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK   CPW57COMBINE
HC       4  14.788
*

KK   SRW57STORAGE
KM        Verrado SR42
KO
RS       1     STOR
SV            24.40    29.60    35.70    42.00    48.50    55.20    62.20    69.30    76.70
SQ                                      368.00  1040.00  1912.00  2944.00  4114.00  5410.00
SE  1084.0 1090.00 1091.00 1092.00 1093.00 1094.00 1095.00 1096.00 1097.00 1098.00
```



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

ST
*

KK  W57W58ROUTE
KM        Cross-section: Taken from aerial and topo
RS       1     FLOW
RC   0.022    0.022    0.022     1236   0.0067     0.00
RX  100.00   115.50   121.80   142.00   179.30   191.30   199.60   207.80
RY  1072.0 1070.00 1064.00 1062.00 1061.90 1064.00 1065.00 1066.00
*

KK     W58BASIN
KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN WOOD/PATEL 2006
KM        NEW 2' CI TOPO OBTAINED 2008
BA   0.131
LG    0.10     0.25     4.65     0.47       71
UI       0      133      428      324       97       23        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  DW58REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    DW58      8.5      0.0
DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
*

KK   CPW58COMBINE
HC       2  14.919
*

KK   SRW58STORAGE
KM        Storage based on new topo section calculations
KO
RS       1     STOR
SV            0.17     2.57     5.40    13.08    31.52    47.89    64.25   111.96   171.81
SQ                   784.10  2217.60  3099.20  3799.80  4122.90  4540.00  6878.8012249.90
SE  1084.0 1086.00 1088.00 1090.00 1092.00 1094.00 1095.00 1096.00 1098.00 1100.00
ST
*
```

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1263          KK  DW58SEDIVERT
1264          KM        Divert is stage storage on 4-10x8 boxes under I-10. Diverted flow goes s
1265          DT   DW58S      0.0      0.0
1266          DI     0.0    100.0   2000.0   4100.0   4200.0   5000.0   6000.0   7000.0   8000.0   9000.0
1267          DQ     0.0    100.0   2000.0   4100.0   4195.5   4606.7   4833.2   4983.7   5102.6   5203.3
              *
1                                          HEC-1 INPUT                                                    PAGE 32

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


1268          KK     W38BASIN
1269          KM        BASIN BOUNDARY FORMED BY MCDOWELL, I-10, JACKRABBIT
1270          KM        AND TUTHILL, DETAILED I-10 TOPO AND CULVERT INFO
1271          BA   0.251
1272          LG    0.24     0.25     4.65     0.38       34
1273          UI       0       54      197      297      491      387      253      132       67       32
1274          UI      13       14        0        0        0        0        0        0        0        0
1275          UI       0        0        0        0        0        0        0        0        0        0
1276          UI       0        0        0        0        0        0        0        0        0        0
1277          UI       0        0        0        0        0        0        0        0        0        0
              *

1278          KK  DW38REDIVERT
1279          KM        Additional Retention based on 100yr 2hr retention.
1280          KM        C value is based on future land use, P=2.7, A=acres
1281          DT    DW38     13.9      0.0
1282          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1283          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1284          KK   CPW38COMBINE
1285          HC       2   15.17
              *

1286          KK  DW38SEDIVERT
1287          KM        Full flow capacity of culverts under I-10 is diverted flow
1288          DT   DW38S      0.0      0.0
1289          DI     0.0    100.0    200.0    300.0    400.0    467.0    500.0    800.0   1000.0  10000.0
1290          DQ     0.0    100.0    200.0    300.0    400.0    467.0    467.0    467.0    467.0    467.0
              *

1291          KK  W38W37ROUTE
1292          KM        Cross section based from 1990 topo, Manning's N Value: clean earth
1293          RS       1     FLOW
1294          RC   0.022    0.022    0.022     2849   0.0053     0.00
1295          RX  100.00   204.00   440.00   608.00   687.00   700.00   736.00   759.00
1296          RY  1083.0  1082.00  1080.00  1078.00  1078.00  1080.00  1082.00  1083.00
              *

1297          KK   CPW37COMBINE
1298          HC       3   19.291
              *

1299          KK  W37S60ROUTE
1300          KM        As-builts for White Tanks #4 FRS Inlet Improvements
1301          KM        Roosevelt St. to McDowell Rd FCD Contract No 94-09
1302          KM        Project No 470050, Sta. 19+31.29-28+00
1303          RS       5     FLOW
1304          RC   0.013    0.013    0.013     8927   0.0015     0.00
1305          RX  100.00   104.60   108.60   112.60   148.60   152.60   156.60   162.40
1306          RY  1051.8  1048.50  1046.50  1045.50  1044.90  1046.90  1048.90  1051.80
              *
1                                          HEC-1 INPUT                                                    PAGE 33

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


1307          KK  DW58SERETRIEVE
1308          KM        Flow traveling from 4-10x4 boxes
1309          DR   DW58S
              *

1310          KK  W58S60ROUTE
1311          KM        Cross-section: I-10 to Van Buren, FRS #4 Inlet
1312          KM        Channel, taken from aerial and topo
1313          RS       1     FLOW
1314          RC   0.035    0.035    0.035     4164   0.0067     0.00
1315          RX  100.00   115.50   121.80   142.00   179.30   191.30   199.60   207.80
1316          RY  1072.0  1070.00  1064.00  1062.00  1061.90  1064.00  1065.00  1066.00
              *

1317          KK  DW38SERETRIEVE
1318          KM        Flow traveling south from culverts under I-10
1319          DR   DW38S
              *

1320          KK  W38S60ROUTE
1321          KM        Desert, assumed 0.5% side slopes, V-ditch
1322          KM        Manning's N Value: avg value for cultivated areas from
1323          KM        Estimated Manning's Roughness Coefficient for
1324          KM        Stream Channels and Flood Plains in MC
1325          RS      12     FLOW
1326          RC   0.038    0.035    0.038     6303   0.0057     0.00
1327          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
1328          RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *

1329          KK     S60BASIN
1330          KM        WHITE TANKS #3 FRS. S-S-D CURVE FROM JAN 2009 FCDMC CURVES
1331          BA   1.014
1332          LG    0.10     0.25     4.15     0.61       84
1333          UI       0      628     1885     2958     1583      525      167       86        0        0
1334          UI       0        0        0        0        0        0        0        0        0        0
1335          UI       0        0        0        0        0        0        0        0        0        0
1336          UI       0        0        0        0        0        0        0        0        0        0
1337          UI       0        0        0        0        0        0        0        0        0        0
              *

1338          KK  DS60REDIVERT
1339          KM        Additional Retention based on 100yr 2hr retention.
1340          KM        C value is based on future land use, P=2.7, A=acres
1341          DT    DS60    104.5      0.0
1342          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1343          DQ     0.0    500.0   5000.0  50000.0   1080.0   1984.0   4269.0   7072.0  10310.0      0.0
              *
1                                          HEC-1 INPUT                                                    PAGE 34

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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1344          KK   CPS60COMBINE
1345          HC       4  20.305
              *

1346          KK   SRS60STORAGE
1347          KM        White Tanks #4 from FCDMC 1/8/2009
1348          KO
1349          RS       1    STOR
1350          SV          573.00  573.00  627.00  760.00 1239.00 1263.00 1275.00 1524.00 1787.00
1351          SQ                                                   40.00   50.00 2305.00 7450.00
1352          SE  1039.0 1039.10 1041.80 1042.80 1044.80 1049.60 1049.80 1049.90 1051.80 1053.80
1353          ST
              *
1354          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

   31         L21
                .
                .
   43           .------->    RL21
   41      DL21RE
                V
                V
   46      L21L22
                .
                .
   53           .         L22
                .           .
                .           .
   65           .           .------->    RL22
   63           .      DL22RE
                .           .
                .           .
   68       CPL22............
                V
                V
   70      L22W01
                .
                .
   77           .         W01
                .           .
                .           .
   86       CPW01............
                V
                V
   88      W01W02
                .
                .
   95           .         W02
                .           .
                .           .
  108           .           .------->    DW02
  105           .      DW02RE
                .           .
                .           .
  111       CPW02............
                V
                V
  113      W02W05
                .
                .
  119           .         W03
                .           V
                .           V
  128           .      W03W04
                .           .
                .           .
  135           .           .         W04
                .           .           .
                .           .           .
  147           .           .           .------->    DW04
  144           .           .      DW04RE
                .           .           .
                .           .           .
  150           .       CPW04............
                .           V
                .           V
  152           .      W04W05
                .           .
                .           .
  159           .           .         W05
                .           .           .
                .           .           .
  171           .           .           .------->    DW05
  168           .           .      DW05RE
                .           .           .
                .           .           .
  174       CPW05........................
                .
                .
  179           .------->    DW05S
  176      DW05SE
                V
                V
  182      W0512A
                .
                .
  190           .         W06
                .           .
                .           .
  199           .           .         W07
                .           .           .
                .           .           .
  211           .           .           .------->    DW07
  208           .           .      DW07RE
                .           .           .
                .           .           .
  214           .       CPW07............
                .           V
                .           V
  216           .      W07W08
                .           .
                .           .
  224           .           .         W08
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                .           .           .
                .           .           .
233             .       CPW08...........
                .           .
                .           .
235             .           .        W09
                .           .           .
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247             .           .           .-------->    DW09
244             .           .     DW09RE
                .           .           .
                .           .           .
250             .       CPW09...........
                .           V
                .           V
252             .      W09W10
                .           .
                .           .
260             .           .        W10
                .           .           .
                .           .           .
269             .       CPW10...........
                .           .
                .           .
271             .           .        W11
                .           .           .
                .           .           .
280             .       CPW11...........
                .           V
                .           V
282             .      W11W12
                .           .
                .           .
289             .           .        W12
                .           .           .
                .           .           .
301             .           .           .-------->    DW12
298             .           .     DW12RE
                .           .           .
                .           .           .
306             .           .           .           .<-------   DW05S
304             .           .           .      DW05SE
                .           .           .           V
                .           .           .           V
307             .           .           .      W0512B
                .           .           .           .
                .           .           .           .
315         CPW12...................................
                V
                V
317        W12W13
                .
                .
323             .        W13
                .           .
                .           .
335             .           .-------->    DW13
332             .      DW13RE
                .           .
                .           .
338         CPW13...........
                V
                V
340        W13W16
                .
                .
347             .        W15
                .           .
                .           .
359             .           .-------->    DW15
356             .      DW15RE
                .           .
                .           .
362             .           .        W14
                .           .           .
                .           .           .
374             .           .           .-------->    DW14
371             .           .     DW14RE
                .           .           V
                .           .           V
377             .           .     W14W15
                .           .           .
                .           .           .
384             .       CPW15...........
                .           V
                .           V
386             .      W15W16
                .           .
                .           .
393             .           .        W16
                .           .           .
                .           .           .
405             .           .           .-------->    DW16
402             .           .     DW16RE
                .           .           .
                .           .           .
408         CPW16........................
                V
                V
410        W16W20
                .
                .
417             .        W18
                .           .
                .           .
429             .           .-------->    DW18
426             .      DW18RE
                .           .
                .           .
432             .           .        W17
                .           .           .
                .           .           .
444             .           .           .-------->    DW17
441             .           .     DW17RE
                .           .           V
                .           .           V
447             .           .     W17W18
                .           .           .
                .           .           .
454             .       CPW18...........
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                 .          V
                 .          V
456              .      W18W20
                 .          .
                 .          .
463              .          .        W19
                 .          .          .
                 .          .          .
476              .          .          .-------->    DW19
473              .          .      DW19RE
                 .          .          V
                 .          .          V
479              .          .       SRW19
                 .          .          V
                 .          .          V
487              .          .      W19W20
                 .          .          .
                 .          .          .
494              .          .          .         W20
                 .          .          .           .
                 .          .          .           .
504          CPW20.......................................
                 V
                 V
506          SRW20
                 .
                 .
514              .        W21A
                 .          .
                 .          .
528              .          .-------->   DW21A
525              .      DW21AR
                 .          .
                 .          .
531         CPW21A............
                 V
                 V
533         21A28A
                 .
                 .
540              .        W28A
                 .          .
                 .          .
554              .          .-------->   DW28A
551              .      DW28AR
                 .          .
                 .          .
557         CPW28A............
                 V
                 V
559         W28A33
                 .
                 .
567              .         W33
                 .          .
                 .          .
580              .          .-------->    DW33
577              .      DW33RE
                 .          .
                 .          .
583          CPW33............
                 V
                 V
585         W33W35
                 .
                 .
593              .         W35
                 .          .
                 .          .
606              .          .-------->    DW35
603              .      DW35RE
                 .          .
                 .          .
609              .          .        W34
                 .          .          .
                 .          .          .
622              .          .          .-------->    DW34
619              .          .      DW34RE
                 .          .          V
                 .          .          V
625              .          .       SRW34
                 .          .          V
                 .          .          V
633              .          .      W34W35
                 .          .          .
                 .          .          .
640          CPW35........................
                 V
                 V
642         W3536A
                 V
                 V
650         W3536B
                 V
                 V
658         W3536C
                 .
                 .
666              .         W36
                 .          .
                 .          .
679              .          .-------->    RW36
677              .      DW36RE
                 .          .
                 .          .
682          CPW36............
                 V
                 V
684         W36W37
                 .
                 .
692              .         W37
                 .          .
                 .          .
705              .          .-------->    DW37
702              .      DW37RE
                 .          .
                 .          .
708              .          .         W22
                 .          .           .
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721                 .-------->    DW22
718          DW22RE
                  V
                  V
724          W22W23

731                     W23

744                     .-------->    DW23
741                DW23RE

747           CPW23............
                  V
                  V
749          W23W24

756                     W24

769                     .-------->    DW24
766                DW24RE

772           CPW24............
                  V
                  V
774          W24W27

781                     W25

794                     .-------->    DW25
791                DW25RE
                      V
                      V
797                 SRW25
                      V
                      V
805                W25W26

812                         W26

825                         .-------->    DW26
822                    DW26RE

828                 CPW26............
                      V
                      V
830                 SRW26
                      V
                      V
838                W26W27

845                         W27

858                         .-------->    DW27
855                    DW27RE

861           CPW27........................
                  V
                  V
863          W27W44

870                     W43

883                     .-------->    DW43
880                DW43RE
                      V
                      V
886                 SRW43
                      V
                      V
894                W43W44

901                         W44

914                         .-------->    DW44
911                    DW44RE

917           CPW44........................
                  V
                  V
919          W44W46

926                     W45

939                     .-------->    DW45
936                DW45RE
                      V
                      V
942                W45W46

949                         W46

962                         .-------->    RW46
959                    DW46RB

965                CPW46A............
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969
967                    DW46RE  .-------> RW46R
972          CPW46B...........
                  V
                  V
974          W46W54
981                    W47
994
991                    DW47RE  .-------> DW47
997                            W48
1007                   CPW47...........
                  V
                  V
1009                   W47W49
1016                           W50
1029
1026                           DW50RE  .-------> DW50
1032                                   W49
1045
1042                                   DW49RE  .-------> DW49
1048                   CPW49.......................
                  V
                  V
1050                   W49W51
1057                           W51
1070
1067                           DW51RE  .-------> DW51
1073                   CPW51...........
1075                           W52
1088
1085                           DW52RE  .-------> DW52
1091                   CPW52...........
                  V
                  V
1093                   W52W53
1100                           W53
1113
1110                           DW53RB  .-------> DW53B
1116                   CPW53...........
1121                           RW53    .------->
1118                   DW53RE
                  V
                  V
1124                   W53W54
1131                           W54
1144
1141                           DW54RE  .-------> DW54
1147         CPW54.......................
                  V
                  V
1149         W54W57
1156                   W56
1168                           RW56    .------->
1166                   DW56RE
                  V
                  V
1171                   W56W57
1178                           W55
1191
1188                           DW55RB  .-------> DW55
1196
1194                           DW55RE  .-------> DW55S
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                 .          .          .          .          V
                 .          .          .          .          V
1199             .          .          .          .     W55W57
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1206             .          .          .          .          .        W57
                 .          .          .          .          .          .
                 .          .          .          .          .          .
1218             .          .          .          .          .          .-------->    RW57
1216             .          .          .          .          .     DW57RE
                 .          .          .          .          .          .
                 .          .          .          .          .          .
1221             .          .      CPW57.......................................
                 .          .          V
                 .          .          V
1223             .          .      SRW57
                 .          .          V
                 .          .          V
1231             .          .     W57W58
                 .          .          .
                 .          .          .
1237             .          .          .        W58
                 .          .          .          .
                 .          .          .          .
1250             .          .          .          .-------->    DW58
1247             .          .          .     DW58RE
                 .          .          .          .
                 .          .          .          .
1253             .          .      CPW58............
                 .          .          V
                 .          .          V
1255             .          .      SRW58
                 .          .          .
                 .          .          .
1265             .          .          .-------->   DW58S
1263             .          .     DW58SE
                 .          .          .
                 .          .          .
1268             .          .          .        W38
                 .          .          .          .
                 .          .          .          .
1281             .          .          .          .-------->    DW38
1278             .          .          .     DW38RE
                 .          .          .          .
                 .          .          .          .
1284             .          .      CPW38............
                 .          .          .
                 .          .          .
1288             .          .          .-------->   DW38S
1286             .          .     DW38SE
                 .          .          V
                 .          .          V
1291             .          .     W38W37
                 .          .          .
                 .          .          .
1297       CPW37........................
               V
               V
1299      W37S60
                 .
                 .
1309             .          .<--------   DW58S
1307             .     DW58SE
                 .          V
                 .          V
1310             .     W58S60
                 .          .
                 .          .
1319             .          .          .<--------   DW38S
1317             .          .     DW38SE
                 .          .          V
                 .          .          V
1320             .          .     W38S60
                 .          .          .
                 .          .          .
1329             .          .          .        S60
                 .          .          .          .
                 .          .          .          .
1341             .          .          .          .-------->    DS60
1338             .          .          .     DS60RE
                 .          .          .          .
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1344       CPS60.................................
               V
               V
1346       SRS60
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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	L21	273.	13.25	70.	20.	7.	0.52		
+	DIVERSION TO	RL21	273.	13.25	70.	20.	7.	0.52		
+	HYDROGRAPH AT	DL21RE	0.	0.00	0.	0.	0.	0.52		
+	ROUTED TO	L21L22	0.	0.00	0.	0.	0.	0.52		
+	HYDROGRAPH AT	L22	87.	13.67	32.	8.	3.	0.36		
+	DIVERSION TO	RL22	87.	13.67	32.	8.	3.	0.36		
+	HYDROGRAPH AT	DL22RE	0.	0.00	0.	0.	0.	0.36		
+	2 COMBINED AT	CPL22	0.	0.00	0.	0.	0.	0.89		

+	ROUTED TO	L22W01	0.	0.00	0.	0.	0.	0.89
+	HYDROGRAPH AT	W01	151.	12.50	21.	5.	2.	0.19
+	2 COMBINED AT	CPW01	150.	12.50	21.	5.	2.	1.08
+	ROUTED TO	W01W02	141.	12.67	21.	5.	2.	1.08
+	HYDROGRAPH AT	W02	544.	12.33	55.	16.	5.	0.39
+	DIVERSION TO	DW02	544.	12.33	39.	10.	3.	0.39
+	HYDROGRAPH AT	DW02RE	335.	12.50	20.	6.	2.	0.39
+	2 COMBINED AT	CPW02	454.	12.50	41.	11.	4.	1.47
+	ROUTED TO	W02W05	343.	12.58	40.	11.	4.	1.47
+	HYDROGRAPH AT	W03	1998.	12.33	273.	83.	28.	1.97
+	ROUTED TO	W03W04	1629.	12.58	272.	83.	28.	1.97
+	HYDROGRAPH AT	W04	2200.	12.33	312.	94.	31.	2.03
+	DIVERSION TO	DW04	71.	11.08	33.	11.	4.	2.03
+	HYDROGRAPH AT	DW04RE	2200.	12.33	307.	83.	28.	2.03
+	2 COMBINED AT	CPW04	3313.	12.42	577.	165.	55.	4.01
+	ROUTED TO	W04W05	3103.	12.58	576.	165.	55.	4.01
+	HYDROGRAPH AT	W05	422.	12.33	42.	12.	4.	0.32
+	DIVERSION TO	DW05	422.	12.33	37.	10.	3.	0.32
+	HYDROGRAPH AT	DW05RE	108.	12.67	7.	2.	1.	0.32
+	3 COMBINED AT	CPW05	3406.	12.58	616.	176.	59.	5.79
+	DIVERSION TO	DW05S	1808.	12.58	320.	102.	34.	5.79
+	HYDROGRAPH AT	DW05SE	1598.	12.58	296.	74.	25.	5.79
+	ROUTED TO	W0512A	1426.	12.75	296.	74.	25.	5.79
+	HYDROGRAPH AT	W06	1115.	12.17	99.	30.	10.	0.71
+	HYDROGRAPH AT	W07	751.	12.08	75.	26.	9.	0.31
+	DIVERSION TO	DW07	399.	12.00	36.	11.	4.	0.31
+	HYDROGRAPH AT	DW07RE	751.	12.08	52.	15.	5.	0.31
+	2 COMBINED AT	CPW07	1797.	12.17	147.	44.	15.	1.02
+	ROUTED TO	W07W08	1521.	12.25	147.	44.	15.	1.02
+	HYDROGRAPH AT	W08	917.	12.08	72.	21.	7.	0.45
+	2 COMBINED AT	CPW08	2276.	12.17	217.	66.	22.	1.47
+	HYDROGRAPH AT	W09	748.	12.08	54.	16.	5.	0.34
+	DIVERSION TO	DW09	86.	11.75	9.	3.	1.	0.34
+	HYDROGRAPH AT	DW09RE	748.	12.08	50.	13.	4.	0.34
+	2 COMBINED AT	CPW09	2952.	12.17	266.	79.	26.	1.80
+	ROUTED TO	W09W10	2382.	12.25	266.	79.	26.	1.80
+	HYDROGRAPH AT	W10	2114.	12.17	217.	64.	21.	1.34
+	2 COMBINED AT	CPW10	4343.	12.25	480.	142.	48.	3.14
+	HYDROGRAPH AT	W11	1334.	12.17	132.	39.	13.	0.81
+	2 COMBINED AT	CPW11	5537.	12.25	610.	181.	60.	3.95

+ ROUTED TO	W11W12	3546.	12.83	609.	181.	60.	3.95
+ HYDROGRAPH AT	W12	1812.	12.50	244.	68.	23.	1.87
+ DIVERSION TO	DW12	1342.	12.33	81.	22.	7.	1.87
+ HYDROGRAPH AT	DW12RE	1812.	12.50	175.	46.	15.	1.87
+ HYDROGRAPH AT	DW05SE	1808.	12.58	320.	102.	34.	5.79
+ ROUTED TO	W0512B	1769.	12.75	320.	102.	34.	5.79
+ 4 COMBINED AT	CPW12	7433.	12.75	1330.	384.	128.	11.61
+ ROUTED TO	W12W13	7338.	12.83	1330.	384.	128.	11.61
+ HYDROGRAPH AT	W13	1790.	12.42	222.	62.	21.	1.58
+ DIVERSION TO	DW13	1762.	12.42	118.	31.	10.	1.58
+ HYDROGRAPH AT	DW13RE	1721.	12.50	116.	31.	10.	1.58
+ 2 COMBINED AT	CPW13	8064.	12.75	1421.	409.	137.	13.19
+ ROUTED TO	W13W16	7676.	12.92	1419.	408.	137.	13.19
+ HYDROGRAPH AT	W15	1553.	12.42	189.	56.	19.	1.23
+ DIVERSION TO	DW15	1553.	12.42	153.	41.	14.	1.23
+ HYDROGRAPH AT	DW15RE	611.	12.67	50.	15.	5.	1.23
+ HYDROGRAPH AT	W14	2199.	12.25	235.	68.	23.	1.58
+ DIVERSION TO	DW14	193.	11.75	29.	9.	3.	1.58
+ HYDROGRAPH AT	DW14RE	2199.	12.25	223.	59.	20.	1.58
+ ROUTED TO	W14W15	1705.	12.33	220.	59.	20.	1.58
+ 2 COMBINED AT	CPW15	1701.	12.33	268.	73.	24.	2.81
+ ROUTED TO	W15W16	1546.	12.50	266.	73.	24.	2.81
+ HYDROGRAPH AT	W16	829.	12.25	82.	23.	8.	0.53
+ DIVERSION TO	DW16	723.	12.17	43.	11.	4.	0.53
+ HYDROGRAPH AT	DW16RE	815.	12.33	43.	11.	4.	0.53
+ 3 COMBINED AT	CPW16	8530.	12.92	1673.	478.	160.	16.53
+ ROUTED TO	W16W20	8426.	12.92	1672.	478.	160.	16.53
+ HYDROGRAPH AT	W18	683.	13.33	189.	56.	19.	1.26
+ DIVERSION TO	DW18	666.	13.33	103.	28.	9.	1.26
+ HYDROGRAPH AT	DW18RE	593.	13.50	102.	28.	9.	1.26
+ HYDROGRAPH AT	W17	2263.	12.25	228.	67.	22.	1.50
+ DIVERSION TO	DW17	2263.	12.25	156.	42.	14.	1.50
+ HYDROGRAPH AT	DW17RE	1637.	12.42	91.	26.	9.	1.50
+ ROUTED TO	W17W18	906.	12.67	89.	26.	9.	1.50
+ 2 COMBINED AT	CPW18	902.	12.67	188.	53.	18.	2.76
+ ROUTED TO	W18W20	627.	12.92	184.	53.	18.	2.76
+ HYDROGRAPH AT	W19	2136.	12.17	194.	58.	20.	1.16
+ DIVERSION TO	DW19	693.	11.92	48.	15.	5.	1.16
+ HYDROGRAPH AT	DW19RE	2136.	12.17	163.	44.	15.	1.16
+ ROUTED TO	SRW19	0.	0.00	0.	0.	0.	1.16

ROUTED TO	W19W20	0.	0.00	0.	0.	0.	1.16
HYDROGRAPH AT	W20	1462.	12.33	163.	47.	16.	1.14
4 COMBINED AT	CPW20	8637.	13.00	1915.	554.	186.	21.59
ROUTED TO	SRW20	0.	0.00	0.	0.	0.	21.59
HYDROGRAPH AT	W21A	321.	12.25	38.	12.	4.	0.20
DIVERSION TO	DW21A	321.	12.25	31.	9.	3.	0.20
HYDROGRAPH AT	DW21AR	100.	12.58	11.	4.	1.	0.20
2 COMBINED AT	CPW21A	100.	12.58	11.	4.	1.	0.20
ROUTED TO	21A28A	43.	13.17	11.	4.	1.	0.20
HYDROGRAPH AT	W28A	891.	12.33	95.	27.	9.	0.64
DIVERSION TO	DW28A	891.	12.33	61.	16.	5.	0.64
HYDROGRAPH AT	DW28AR	635.	12.42	41.	11.	4.	0.64
2 COMBINED AT	CPW28A	630.	12.42	51.	15.	5.	0.84
ROUTED TO	W28A33	337.	12.83	50.	15.	5.	0.84
HYDROGRAPH AT	W33	943.	12.42	99.	27.	9.	0.84
DIVERSION TO	DW33	572.	12.17	25.	7.	2.	0.84
HYDROGRAPH AT	DW33RE	943.	12.42	78.	20.	7.	0.84
2 COMBINED AT	CPW33	942.	12.42	126.	34.	11.	1.68
ROUTED TO	W33W35	772.	12.58	125.	34.	11.	1.68
HYDROGRAPH AT	W35	406.	12.25	39.	11.	4.	0.28
DIVERSION TO	DW35	406.	12.25	37.	10.	3.	0.28
HYDROGRAPH AT	DW35RE	22.	12.83	5.	1.	0.	0.28
HYDROGRAPH AT	W34	448.	12.17	43.	13.	4.	0.23
DIVERSION TO	DW34	448.	12.17	32.	9.	3.	0.23
HYDROGRAPH AT	DW34RE	247.	12.33	15.	5.	2.	0.23
ROUTED TO	SRW34	0.	0.00	0.	0.	0.	0.23
ROUTED TO	W34W35	0.	0.00	0.	0.	0.	0.23
3 COMBINED AT	CPW35	773.	12.67	129.	36.	12.	2.19
ROUTED TO	W3536A	773.	12.67	129.	36.	12.	2.19
ROUTED TO	W3536B	709.	12.92	127.	36.	12.	2.19
ROUTED TO	W3536C	689.	13.00	127.	36.	12.	2.19
HYDROGRAPH AT	W36	734.	12.50	88.	24.	8.	0.72
DIVERSION TO	RW36	734.	12.50	58.	15.	5.	0.72
HYDROGRAPH AT	DW36RE	503.	12.67	33.	9.	3.	0.72
2 COMBINED AT	CPW36	812.	13.00	159.	45.	15.	2.91
ROUTED TO	W36W37	726.	13.33	157.	45.	15.	2.91
HYDROGRAPH AT	W37	1311.	12.50	171.	50.	17.	1.21
DIVERSION TO	DW37	1292.	12.42	101.	27.	9.	1.21
HYDROGRAPH AT	DW37RE	1149.	12.58	82.	23.	8.	1.21
HYDROGRAPH AT	W22	1353.	12.17	114.	35.	12.	0.78

+	DIVERSION TO	DW22	363.	11.92	29.	9.	3.	0.78
+	HYDROGRAPH AT	DW22RE	1353.	12.17	97.	26.	9.	0.78
+	ROUTED TO	W22W23	1265.	12.25	96.	26.	9.	0.78
+	HYDROGRAPH AT	W23	1577.	12.17	135.	41.	14.	0.90
+	DIVERSION TO	DW23	772.	12.00	46.	13.	4.	0.90
+	HYDROGRAPH AT	DW23RE	1577.	12.17	101.	27.	9.	0.90
+	2 COMBINED AT	CPW23	2738.	12.25	197.	53.	18.	1.68
+	ROUTED TO	W23W24	2371.	12.33	196.	53.	18.	1.68
+	HYDROGRAPH AT	W24	789.	12.25	73.	22.	7.	0.47
+	DIVERSION TO	DW24	562.	12.08	29.	8.	3.	0.47
+	HYDROGRAPH AT	DW24RE	789.	12.25	50.	13.	4.	0.47
+	2 COMBINED AT	CPW24	3131.	12.25	245.	66.	22.	2.15
+	ROUTED TO	W24W27	2860.	12.33	243.	66.	22.	2.15
+	HYDROGRAPH AT	W25	1446.	12.33	160.	47.	16.	1.10
+	DIVERSION TO	DW25	11.	6.75	8.	2.	1.	1.10
+	HYDROGRAPH AT	DW25RE	1446.	12.33	160.	45.	15.	1.10
+	ROUTED TO	SRW25	0.	0.00	0.	0.	0.	1.10
+	ROUTED TO	W25W26	0.	0.00	0.	0.	0.	1.10
+	HYDROGRAPH AT	W26	1111.	12.25	112.	32.	11.	0.68
+	DIVERSION TO	DW26	718.	12.08	39.	11.	4.	0.68
+	HYDROGRAPH AT	DW26RE	1111.	12.25	81.	21.	7.	0.68
+	2 COMBINED AT	CPW26	1108.	12.25	80.	21.	7.	1.78
+	ROUTED TO	SRW26	0.	0.00	0.	0.	0.	1.78
+	ROUTED TO	W26W27	0.	0.00	0.	0.	0.	1.78
+	HYDROGRAPH AT	W27	826.	12.17	65.	19.	6.	0.41
+	DIVERSION TO	DW27	721.	12.08	36.	10.	3.	0.41
+	HYDROGRAPH AT	DW27RE	709.	12.25	33.	9.	3.	0.41
+	3 COMBINED AT	CPW27	3252.	12.33	275.	75.	25.	4.35
+	ROUTED TO	W27W44	2533.	12.50	271.	75.	25.	4.35
+	HYDROGRAPH AT	W43	493.	12.08	36.	11.	4.	0.21
+	DIVERSION TO	DW43	129.	11.83	11.	3.	1.	0.21
+	HYDROGRAPH AT	DW43RE	493.	12.08	29.	8.	3.	0.21
+	ROUTED TO	SRW43	0.	0.00	0.	0.	0.	0.21
+	ROUTED TO	W43W44	0.	0.00	0.	0.	0.	0.21
+	HYDROGRAPH AT	W44	839.	12.33	88.	25.	8.	0.60
+	DIVERSION TO	DW44	839.	12.33	71.	19.	6.	0.60
+	HYDROGRAPH AT	DW44RE	362.	12.58	22.	7.	2.	0.60
+	3 COMBINED AT	CPW44	2785.	12.58	292.	81.	27.	5.15
+	ROUTED TO	W44W46	2658.	12.58	291.	81.	27.	5.15
+	HYDROGRAPH AT	W45	1795.	12.25	187.	52.	17.	1.03

DIVERSION TO	DW45	1231.	12.17	72.	19.	6.	1.03
HYDROGRAPH AT	DW45RE	1795.	12.25	124.	33.	11.	1.03
ROUTED TO	W45W46	1257.	12.58	123.	33.	11.	1.03
HYDROGRAPH AT	W46	1280.	12.42	160.	46.	15.	0.93
DIVERSION TO	RW46	1280.	12.42	113.	30.	10.	0.93
HYDROGRAPH AT	DW46RB	812.	12.58	58.	16.	5.	0.93
2 COMBINED AT	CPW46A	2053.	12.58	180.	49.	16.	1.96
DIVERSION TO	RW46R	1224.	12.58	66.	17.	6.	1.96
HYDROGRAPH AT	DW46RE	830.	12.58	114.	32.	11.	1.96
2 COMBINED AT	CPW46B	3302.	12.58	394.	110.	37.	7.11
ROUTED TO	W46W54	3225.	12.67	392.	110.	37.	7.11
HYDROGRAPH AT	W47	871.	12.25	108.	32.	11.	0.67
DIVERSION TO	DW47	7.	6.33	5.	1.	0.	0.67
HYDROGRAPH AT	DW47RE	871.	12.25	108.	31.	10.	0.67
HYDROGRAPH AT	W48	480.	12.25	57.	17.	6.	0.35
2 COMBINED AT	CPW47	1348.	12.25	165.	48.	16.	1.02
ROUTED TO	W47W49	1260.	12.33	165.	48.	16.	1.02
HYDROGRAPH AT	W50	1302.	12.50	190.	57.	19.	1.35
DIVERSION TO	DW50	13.	5.33	8.	2.	1.	1.35
HYDROGRAPH AT	DW50RE	1302.	12.50	190.	55.	18.	1.35
HYDROGRAPH AT	W49	641.	12.25	64.	19.	6.	0.38
DIVERSION TO	DW49	22.	11.50	8.	3.	1.	0.38
HYDROGRAPH AT	DW49RE	641.	12.25	61.	16.	5.	0.38
3 COMBINED AT	CPW49	2815.	12.33	413.	119.	40.	2.75
ROUTED TO	W49W51	2672.	12.42	413.	119.	40.	2.75
HYDROGRAPH AT	W51	257.	12.17	21.	6.	2.	0.15
DIVERSION TO	DW51	192.	12.08	8.	2.	1.	0.15
HYDROGRAPH AT	DW51RE	256.	12.17	14.	4.	1.	0.15
2 COMBINED AT	CPW51	2771.	12.42	426.	122.	41.	2.90
HYDROGRAPH AT	W52	1199.	12.50	160.	48.	16.	1.12
DIVERSION TO	DW52	24.	10.58	14.	5.	2.	1.12
HYDROGRAPH AT	DW52RE	1199.	12.50	158.	43.	14.	1.12
2 COMBINED AT	CPW52	3959.	12.42	583.	165.	55.	4.02
ROUTED TO	W52W53	3785.	12.58	583.	165.	55.	4.02
HYDROGRAPH AT	W53	1088.	12.17	78.	23.	8.	0.57
DIVERSION TO	DW53B	712.	12.08	37.	10.	3.	0.57
HYDROGRAPH AT	DW53RB	1088.	12.17	46.	12.	4.	0.57
2 COMBINED AT	CPW53	3829.	12.50	627.	177.	59.	4.59
DIVERSION TO	RW53	1059.	12.50	106.	27.	9.	4.59
HYDROGRAPH AT	DW53RE	2770.	12.50	521.	150.	50.	4.59

+	ROUTED TO	W53W54	2608.	12.67	520.	150.	50.	4.59
+	HYDROGRAPH AT	W54	1146:	12.42	134.	38.	13.	0.98
+	DIVERSION TO	DW54	1146.	12.42	91.	24.	8.	0.98
+	HYDROGRAPH AT	DW54RE	798.	12.58	52.	14.	5.	0.98
+	3 COMBINED AT	CPW54	6004.	12.67	907.	260.	87.	12.68
+	ROUTED TO	W54W57	5691.	12.75	906.	260.	87.	12.68
+	HYDROGRAPH AT	W56	797.	12.17	77.	24.	8.	0.45
+	DIVERSION TO	RW56	797.	12.17	77.	24.	8.	0.45
+	HYDROGRAPH AT	DW56RE	0.	0.00	0.	0.	0.	0.45
+	ROUTED TO	W56W57	0.	0.00	0.	0.	0.	0.45
+	HYDROGRAPH AT	W55	762.	12.25	74.	22.	7.	0.50
+	DIVERSION TO	DW55	710.	12.17	39.	11.	4.	0.50
+	HYDROGRAPH AT	DW55RB	682.	12.33	42.	12.	4.	0.50
+	DIVERSION TO	DW55S	515.	12.33	20.	5.	2.	0.50
+	HYDROGRAPH AT	DW55RE	167.	12.33	23.	7.	2.	0.50
+	ROUTED TO	W55W57	118.	12.75	22.	7.	2.	0.50
+	HYDROGRAPH AT	W57	1741.	12.25	198.	61.	20.	1.16
+	DIVERSION TO	RW57	1741.	12.25	196.	54.	18.	1.16
+	HYDROGRAPH AT	DW57RE	35.	14.50	20.	7.	2.	1.16
+	4 COMBINED AT	CPW57	5709.	12.75	920.	268.	89.	14.79
+	ROUTED TO	SRW57	5380.	12.83	877.	250.	83.	14.79
+	ROUTED TO	W57W58	5339.	12.83	875.	250.	83.	14.79
+	HYDROGRAPH AT	W58	310.	12.08	31.	11.	4.	0.13
+	DIVERSION TO	DW58	140.	11.92	14.	4.	1.	0.13
+	HYDROGRAPH AT	DW58RE	310.	12.08	22.	6.	2.	0.13
+	2 COMBINED AT	CPW58	5354.	12.83	883.	256.	85.	14.92
+	ROUTED TO	SRW58	4082.	13.08	883.	256.	85.	14.92
+	DIVERSION TO	DW58S	4081.	13.08	883.	256.	85.	14.92
+	HYDROGRAPH AT	DW58SE	1.	13.08	0.	0.	0.	14.92
+	HYDROGRAPH AT	W38	415.	12.25	44.	14.	5.	0.25
+	DIVERSION TO	DW38	380.	12.17	25.	7.	2.	0.25
+	HYDROGRAPH AT	DW38RE	387.	12.33	23.	7.	2.	0.25
+	2 COMBINED AT	CPW38	345.	12.33	21.	6.	2.	15.17
+	DIVERSION TO	DW38S	345.	12.33	21.	6.	2.	15.17
+	HYDROGRAPH AT	DW38SE	0.	0.00	0.	0.	0.	15.17
+	ROUTED TO	W38W37	0.	0.00	0.	0.	0.	15.17
+	3 COMBINED AT	CPW37	1155.	12.58	219.	62.	21.	19.29
+	ROUTED TO	W37S60	640.	13.58	191.	56.	19.	19.29
+	HYDROGRAPH AT	DW58SE	4081.	13.08	883.	256.	85.	14.92
+	ROUTED TO	W58S60	4038.	13.17	880.	256.	85.	14.92

+	HYDROGRAPH AT	DW38SE	345.	12.33	21.	6.	2.	15.17
+	ROUTED TO	W38S60	96.	13.33	19.	6.	2.	15.17
+	HYDROGRAPH AT	S60	2312.	12.17	266.	92.	31.	1.01
+	DIVERSION TO	DS60	2277.	12.17	182.	53.	18.	1.01
+	HYDROGRAPH AT	DS60RE	1738.	12.25	129.	39.	13.	1.01
+	4 COMBINED AT	CPS60	4621.	13.25	1165.	344.	115.	20.31
+	ROUTED TO	SRS60	0.	0.00	0.	0.	0.	20.31

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