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FLOODPLAIN/FLOODWAY ANALYSIS
FOR THE
AGUA FRIA RIVER
NORTHERN AVENUE TO CACTUS ROAD

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5333 North 7th Street, Suite 224
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Registered Professional Engineer (Civil)
CERTIFICATE NO. 13505
ROBERT L. WARD
Date Signed 9/8/87
ARIZONA, U.S.A.

September 1987

18.0-00-1-09/87

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

  1           ID        WTM100YR
  2           ID
  3           ID
  4           ID        THIS IS THE HEC-1 COMPUTER MODEL FOR THE WITTMANN AREA DRAINAGE MASTER
  5           ID        STUDY.  THIS STUDY IS PREPARED FOR THE FLOOD CONTROL DISTRICT OF
  6           ID        MARICOPA COUNTY BY THE WLB GROUP, INC.
  7           ID
  8           ID        THIS IS THE 100 YEAR MODEL FOR THE STUDY AREA AND INCLUDES STORAGE
  9           ID        ROUTING AND DIVERSIONS ALONG THE A.T. & S.F. RAILROAD, THE CAP CANAL,
 10           ID        AND THE BEARDSLEY CANAL.
 11           ID
 12           ID
 13           ID
              *DIAGRAM
 14           IT      3 26JAN87    1200     640
 15           IN     15 26JAN87    1200
 16           IO      5
 17           JD   4.21    .001
 18           PC   .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 19           PC   .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 20           PC   .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 21           PC   .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 22           PC   .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 23           PC   .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 24           PC   .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 25           PC   .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 26           PC   .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 27           PC   .983    .986    .989    .992    .995    .998   1.00   1.000   1.000   1.000
 28           JD   4.17      10
 29           JD   4.00      50
 30           JD   3.93     100
 31           JD   3.82     350

 32           KK      1
 33           KM        RUNOFF FROM SUBWATERSHED 1.
 34           KM        UNIT HYDROGRAPHS HAVE BEEN COMPUTED FOR EACH SUBWATERSHED USING THE
 35           KM        CORPS OF ENGINEERS S-GRAPH COMPUTATIONS FOR UNIT HYDROGRAPHS.  THE
 36           KM        S-GRAPH PROGRAM HAS BEEN DEVELOPED FOR THE PHOENIX MOUNTAIN AND PHOENIX
 37           KM        VALLEY AREAS.  THIS SHOULD GIVE A MORE RELIABLE UNIT HYDROGRAPH FOR THE
 38           KM        HEC-1 PROGRAM TO UTILIZE WITHIN THE WITTMANN ADMS AREA.
 39           BA   .088
 40           LS      0      81       0
 41           UK    200   .0160     .11     100
 42           RK   2900   .0132     .05            TRAP      0      15

 43           KK     C1
 44           KM        STORAGE ROUTE THROUGH C1.  4-30"CMP'S AND 1-24"CMP ON GRAND AV.
 45           RS      1    STOR       0       0
 46           SV      0    1.07    2.00    3.61
 47           SQ      0      36      55     373
 48           SE 1970.5  1972.5    1973  1973.5
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I. INTRODUCTION

Construction of the new Waddell Dam will have a significant impact on existing floodplain delineations for downstream reaches of the Agua Fria River. This will occur in response to tentative plans for a specific allotment of flood control storage for the new dam, thus giving it the capability to more effectively regulate outflows (during periods of large inflows) than is presently available with the existing dam.

Construction of the new Waddell Dam began in mid-1986 and is estimated to be completed by late 1993 or early 1994. Discussions with representatives from the Bureau of Reclamation indicate that tentative plans call for approximately 120,000 acre-feet of storage to be allocated for flood control purposes. This is described as a seasonal allocation that may vary in response to a joint-use need for water conservation storage. The final determination of the actual flood control storage will be based on the results of a new hydrologic study to be initiated by the Corps of Engineers in October 1987. This Corps' study will evaluate reservoir operation and downstream flooding impacts as a function of different allotments of flood control storage. A benefit/cost analysis will be incorporated into the study to identify the economic impacts associated with each of the different flood control storage allotments. This information will then be used to make a final decision on a specific flood control storage capacity. The Corps' study is estimated to take approximately 1 to 1 1/2 years to complete.

Pending completion of the Corps' study, representatives from the Bureau of Reclamation indicate that the maximum release rate from the new dam may be approximately 10,000 cfs for a 100-year flood. This is substantially lower than what would occur under present day conditions, although the present flood control storage is a function of fluctuations in the water level in Lake Pleasant.

From a flood control perspective, construction of the new Waddell Dam will benefit downstream land owners along the Agua Fria River. This benefit will be in the form of a narrower Floodplain/Floodway, which will liberate more property for potential development. Accordingly, the purpose of this study is to develop an estimate of the new 100-year Floodplain/Floodway that might be expected to occur for that reach of the Agua Fria River between Northern Avenue and Cactus Road. More specifically, the study will address the Floodplain/Floodway changes to a 160 acre parcel of property located along the eastern side of the Agua Fria River between Olive Avenue and Peoria Avenue. Plate 1 is a large aerial photograph showing the location of the property relative to the revised Floodplain/Floodway boundaries discussed in this report.

As will be discussed in Section III of this report, the peak 100-year discharge used for this study is very preliminary and subject to change at such time as the Corps of Engineers completes the pending hydrology study related to the operation

of the new dam. Depending on the results of the Corps' study, the Floodplain/Floodway limits presented in this report may be subject to change.

II. DATA SOURCES

The following data sources were used in completing this report:

2.1 Topography

Topographic maps (1"=400', 4' C.I.) for this reach of the Agua Fria River were obtained from the Flood Control District of Maricopa County. These maps, which are the same base maps used by the Corps of Engineers for the existing Floodplain/Floodway delineation of this reach of the Agua Fria River, are based on aerial photography dated April 19, 1983.

2.2 HEC-2 DATA

The Corps of Engineers has previously prepared a Floodplain/Floodway study for this reach of the Agua Fria River (based on hydrology with the existing Waddell Dam). In order to provide an unbiased comparison with the Corps' delineation, the Corps' HEC-2 model was used as the basis for this study. Appropriate changes were made to the model to simulate the hydraulic impact of the new Olive Avenue Bridge.

III. HYDROLOGY

That watershed contributing runoff to this reach of the Agua Fria River is partially controlled by three major, man-made structures:

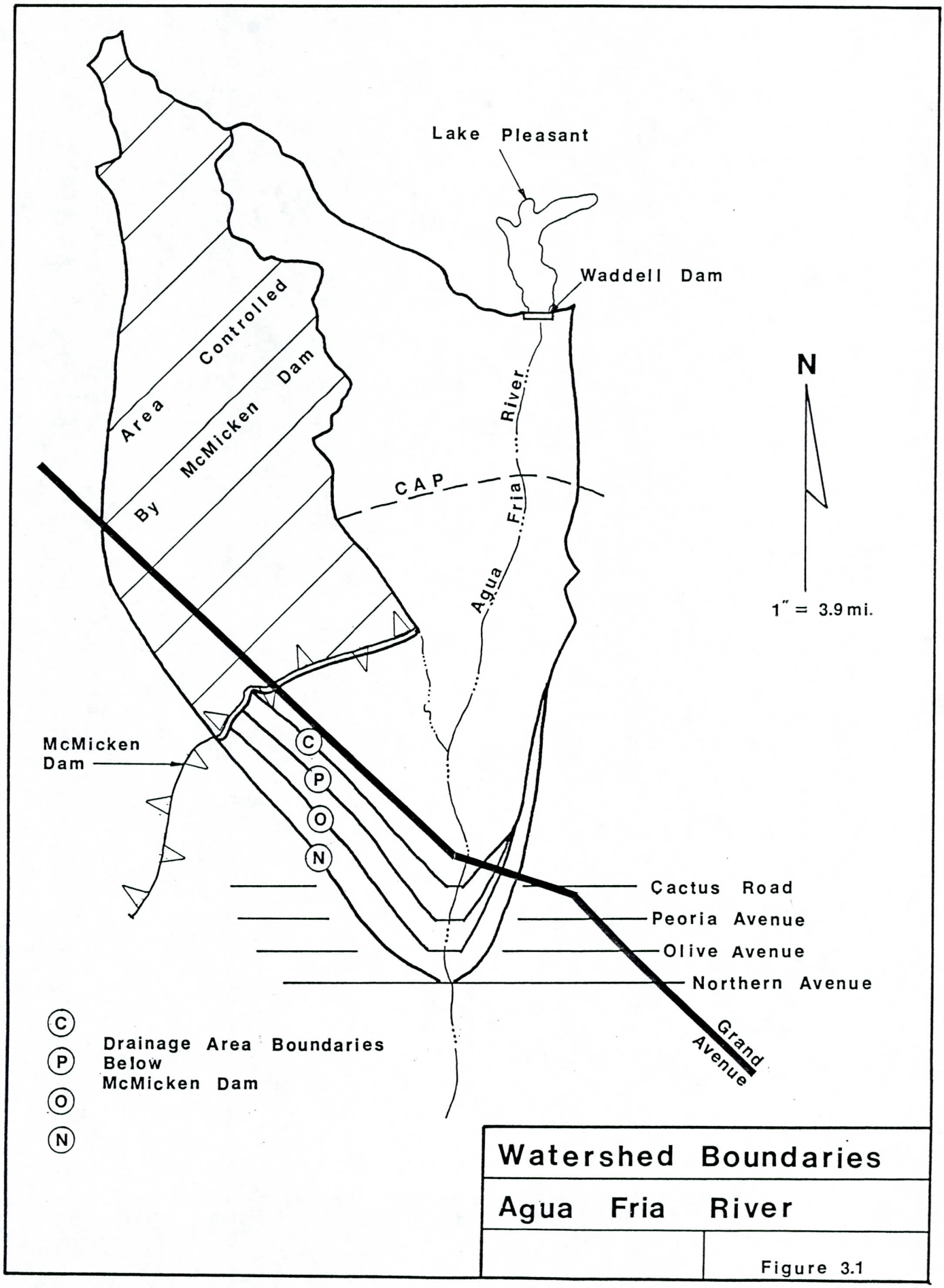
1. Waddell Dam
2. McMicken Dam
3. Central Arizona Project (CAP) Aqueduct

Figure 3.1 illustrates the location of these structures in relation to the watershed boundaries and the reach of the Agua Fria River analyzed in this report.

It is not within the scope of this study to undertake a detailed hydrologic analysis of the contributing watershed. Such a study would require a major engineering effort. However, a simpler, less time-consuming approach can be employed to arrive at an estimate of the new 100-year peak discharge in the Agua Fria River below Waddell Dam. This procedure develops peak discharge estimates for three separate areas of the watershed. These areas are identified as follows:

1. Area controlled by Waddell Dam
2. Area controlled by McMicken Dam
3. Uncontrolled area between Waddell Dam and McMicken Dam.

Peak discharge estimates were generated for each of these areas and then added together to arrive at a total discharge to be used for the new Floodplain/Floodway delineation. The development of these estimates is discussed in the following subsections of this report.


Lake Pleasant
Waddell Dam
Area Controlled By McMicken Dam
CAP
Agua Fria River
N
1" = 3.9 mi.
McMicken Dam
C
P
O
N
Cactus Road
Peoria Avenue
Olive Avenue
Northern Avenue
Grand Avenue
C P O N
Drainage Area Boundaries Below McMicken Dam
Watershed Boundaries
Agua Fria River
Figure 3.1

3.1 Discharge From Waddell Dam

A hydrology study for the new Waddell Dam has not yet been completed. As indicated previously in this report, the Corps of Engineers is about to initiate this study. Initial estimates indicate that it will take approximately one to one and one half years to complete.

As an interim measure, the Bureau of Reclamation was contacted in an effort to obtain an estimate of the maximum release rate that could be expected from the new Waddell Dam during a 100-year flood. Bureau representatives indicated that the dam was to be designed for no spillway flow during a 100-year event. However, the low-level outlets would be designed to release approximately 10,000 cfs during this same event. Accordingly, for the purpose of this study, 10,000 cfs will be used as the peak discharge from the new Waddell Dam during a 100-year flood.

3.2 Discharge From McMicken Dam

Figure 3.1 shows the portion of the watershed controlled by McMicken Dam. Floodwaters intercepted by this dam are released into an outlet channel which conveys the water in an easterly direction for discharge into a natural wash which is tributary to the Agua Fria River at a location approximately 3 miles north of Highway 89 (Grand Avenue).

The Flood Control District of Maricopa County recently retained a consultant (The WLB Group) to prepare the Wittmann Area Drainage Master Study (ADMS). This study includes a very detailed hydrologic analysis of the area controlled by McMicken

Dam. Discussions with representatives of The WLB Group indicate the maximum release rate from the McMicken Dam outlet channel is 5,174 cfs during a 100-year event. This discharge is predicted to occur at the point where the outlet channel discharges into a natural wash, approximately 4 miles above its confluence with the Agua Fria River. Accordingly, this discharge value does not include any contributions from areas lying below McMicken Dam, or its outlet channel.

As a matter of interest, it should be noted that The WLB Group indicated that the segment of the CAP Aqueduct, extending through their study area, provides a significant amount of attenuation to the peak discharge of floodwaters intercepted by the CAP. This occurs in response to the cross-drainage structures (overchutes, pipes, etc.) that have been built to allow drainage to cross the aqueduct. Many reaches of the CAP incorporate an earth berm, or levee, (along the upstream side of the canal) which functions similar to a reservoir in that it ponds water and releases it through the cross-drainage structures. The ponding, or storage effect, created by these berms can cause significant attenuation in the peak discharge passing over the aqueduct at the cross-drainage structure locations. The hydrologic computer model developed by The WLB Group verified this phenomenon for that reach of the CAP extending through the study area investigated as part of the Wittmann ADMS.

In summary, the preliminary results from the Wittmann ADMS will be used as the basis for selecting 5,174 cfs as the peak discharge from that portion of the project watershed controlled by McMicken Dam.

3.3 Uncontrolled Area Between McMicken Dam and Waddell Dam

For that portion of the project watershed not controlled by either McMicken Dam or Waddell Dam, an empirically developed regression equation was used to estimate the peak discharge resulting from a 100-year storm. Such equations have been developed by the United States Geological Survey (USGS) for the Arizona Department of Transportation. This information is published in a report entitled: Methods For Estimating The Magnitude And Frequency of Floods In Arizona, USGS, Water Resources Division (R.H. Roeske), September 1978.

By applying regression techniques to actual stream gage data, the USGS has developed peak discharge equations for five regions of Arizona. For the Agua Fria River watershed, which is contained within Region 3, the following equation is published for use in estimating the peak discharge for a 100-year flood:

$$Q_{100} = 553A^{0.610} E^{-1.30} P^{0.915}$$

where Q_{100} = 100-year peak discharge cfs

A = drainage area size (sq. miles)

E = mean basin elevation, in thousands of feet

P = mean annual precipitation (inches)

The required input data for this equation was developed from a watershed boundary delineation on a 1:250,000 scale map (C.I.= 200'). The drainage area was planimetered from this map, while

the mean basin elevation was determined from a grid overlay of the watershed boundaries (grid line spacing was 2.6 miles vertically and horizontally). Mean annual precipitation was estimated from Figure 2 in the previously referenced USGS report (1978).

Referring to Figure 3.1, it will be noted that drainage area boundaries have been delineated at 1 mile increments through the reach of the Agua Fria River for which this new Floodplain/Floodway study is being performed. This provides a mechanism for assessing the change in discharge that might be expected to occur as additional drainage area is intercepted by the river. The input data and results of these calculations are presented in Table 3.1, as part of Subsection 3.4 of this report.

3.4 Total Estimated Discharge For 100-Year Event

Assuming the previously computed peak discharges from each of the three watershed sub-areas will simultaneously arrive at the study reach, Table 3.1 is presented to summarize the total 100-year peak discharge that might be expected at specific river locations. This table includes the input data and results from the peak discharge regression equation calculations (used for the uncontrolled area between McMicken Dam and Waddell Dam), the contribution from new Waddell Dam, and the contribution from McMicken Dam.

Two data sets are included in Table 3.1. The first data set assumes the CAP Aqueduct will attenuate all flood flows above the aqueduct to the extent that they would not effectively add to the peak discharge resulting from those areas below the aqueduct.

TABLE 3.1
PEAK DISCHARGE CALCULATION SUMMARY
AGUA FRIA RIVER
FLOODPLAIN ANALYSIS
NORTHERN AVENUE TO CACTUS ROAD

Location	Drainage Area (sq. mi.)	Mean Basin Elevation (thousands ft)	Mean Annual Precipitation (inches)	Calculated Q100 (cfs) From Uncontrolled Area	Plus Contribution From New Waddell Dam (cfs)	Plus Contribution From McMicken Dam (cfs)	Total Estimated Discharge Q100 (cfs)
(excluding area above CAP)							
Cactus Road	71	1.297	9.0	39655	10000	5174	54829
Peoria Avenue	78	1.297	9.0	41996	10000	5174	57170
Olive Avenue	87	1.297	9.0	44889	10000	5174	60063
Northern Avenue	100	1.297	9.0	48869	10000	5174	64043
(including area above CAP)							
Cactus Road	133	1.689	10.0	45431	10000	5174	60605
Peoria Avenue	140	1.689	10.0	46875	10000	5174	62049
Olive Avenue	149	1.689	10.0	48691	10000	5174	63865
Northern Avenue	162	1.689	10.0	51240	10000	5174	66414

The second data set assumes the CAP has no appreciable impact on the runoff response of the watershed. Under this second scenario, all the drainage area above the CAP is included in the peak discharge calculations for the uncontrolled area between McMicken Dam and Waddell Dam.

In reviewing the two scenarios in Table 3.1, it can be seen that there is not a dramatic difference between the peak discharge values associated with the two conditions. To provide a degree of conservatism, the higher discharge values associated with the second scenario (including drainage area above CAP) were selected for use in the new Floodplain/Floodway study presented in this report.

Table 3.2 presents a comparison of the peak discharge values used by the Corps of Engineers for the existing Floodplain/Floodway delineation to those values recommended for use in this revised study space. It should be noted that the peak discharge values in Table 3.2 exhibit an opposite trend, i.e., the Corps' values decrease in the downstream direction, while the new Waddell Dam figures increase in the downstream direction. Although the Corps' hydrology study was not reviewed as part of this report, this attenuation in discharge is undoubtedly due to channel storage effects. As indicated previously, very simple hydrology calculations were performed for the new Waddell Dam condition. These calculations are primarily a function of drainage area size, which increases in the downstream direction. No river routing simulation was done for this study. Accordingly, the revised hydrology values do not reflect storage

TABLE 3.2
COMPARISON OF PEAK DISCHARGE VALUES
EXISTING WADDELL DAM vs NEW WADDELL DAM
100-YEAR FLOOD
Agua Fria River

Location	Existing *1 Waddell Dam (cfs)	New *2 Waddell Dam (cfs)
Cactus Road	105,600	60,605
Peoria Avenue	102,500	62,049
Olive Avenue	99,000	63,865
Northern Avenue	96,150	66,414

*1 Values taken from Corps HEC-2 printout dated 19 MAR 84.

*2 Values taken from Table 3.1 of this report.

or transmission losses through the study reach. This provides a degree of conservatism to the Floodplain/Floodway study presented in this report, i.e., the recommended peak discharge values may be somewhat higher than what will actually occur.

In concluding this section, it should be emphasized that the hydrologic analysis is considered very approximate. No attempt has been made to differentiate between the shape or arrival times of the hydrographs from the three sub-areas of the watershed; such an analysis would require a computerized, hydrologic simulation of the entire watershed, as well as operational data on the proposed new Waddell Dam. As a conservative estimate, the arrival of the hydrograph peaks were assumed to be coincident.

IV. FLOODPLAIN/FLOODWAY ANALYSIS

The basic objective of this report is to identify the anticipated changes that would occur to the existing 100-year Floodplain/Floodway as a result of the construction of the new Waddell Dam. Using the hydrology data presented in Table 3.1 of this report, a water surface profile analysis was undertaken to determine the new Floodplain/Floodway boundaries. As indicated in Section II of this report, the same HEC-2 model used by the Corps of Engineers for the existing Floodplain/Floodway analysis was used for this new analysis. This complies with Federal Emergency Management Agency (FEMA) criteria which requires (when available) that the same hydraulic computer model be used to identify proposed changes to previously delineated

Floodplain/Floodway boundaries. However, it should be noted that the use of this model does not incorporate any changes to cross-sectional geometry that may have occurred (due to development or in-stream gravel mining) since the original topographic maps were prepared in 1983. Field inspection and a review of recent aerial photographs indicate that some changes have occurred (excluding the Olive Avenue Bridge), but that they will probably have a fairly insignificant impact to the 160 acre parcel between Olive Avenue and Peoria Avenue.

Using copies of the Corps' input/output data (provided by the Flood control District of Maricopa County), the HEC-2 model was recreated on a Zenith 241 micro-computer.

It should be noted that several of the Corps' cross-sections contained more than 100 ground coordinates (GR points) which exceeds the maximum limit of 100 which must be adhered to when using the micro-computer version of HEC-2. Accordingly, extraneous ground control points were eliminated from several cross-sections in order to meet this limitation. Only those GR points which were well above the existing 100-year water surface profile (at the ends of the cross-sections) were eliminated. Some points were also eliminated within the cross-sections where 3, 4, 5, or even 6 coordinate stations were used to describe a continuous, level segment of land. Care was taken to insure that none of the eliminated GR points would change the shape of the cross-section that was actually being used in the hydraulic calculations.

Using the existing Corps' peak discharge values, water surface elevations computed by this duplicate model agreed exactly with the Corps' elevations for both the Floodplain and Floodway runs. The only exception was noted on the Floodway run at Cross-Section 12.584, where the duplicate model was +0.01 feet higher than the Corps' run. This insignificant difference is attributed to round-off logic within the different computers used for the analyses.

Once the recreated HEC-2 model was verified as a valid duplicate of the Corps' model, revisions were made to reflect the impact of the recently constructed Olive Avenue Bridge. Copies of the "As-Built" drawings for the bridge were obtained from the Maricopa County Highway Department. The data from these plans was used to develop a "Special Bridge" routine for input into the HEC-2 model. The following assumptions were used in modeling this bridge.

1. The bridge was constructed with 5.5' diameter circular piers. For modeling purposes, 2.0' of debris was assumed to extend from each side of the piers, giving a total effective pier diameter of 9.5'. A Mannings "n" value of 0.030 was used through the bridge.

2. The approaches to this bridge have not yet been constructed, although they have been designed and were included with the bridge plans. The approaches are designed to be elevated substantially above the existing 100-year floodplain. Construction of these approaches will effectively constrict the floodplain width to that of the bridge opening (approximately 1500'). Accordingly, BT cards were used to describe a weir

profile on the basis of the proposed roadway approach elevations. Using either existing or proposed hydrology, no water was found to flow over the approaches.

The weir profile on the actual bridge structure was elevated 3' above the deck elevation to simulate the influence of a concrete guard rail.

4. Cross-sectional geometry on either side of the bridge was input with the addition of two cross-sections (13.41 on the downstream side and 13.42 on the upstream side.) Geometry from Cross-Section 13.41 was taken from the bridge plans on the basis of the "Finish Profile Grade" for that portion of the existing detour road between the bridge abutments. Beyond the bridge abutments, the "Finish Profile Grade" for the proposed approaches was used. Geometry for Cross-Section 13.42 (upstream side of bridge) was taken from the "Profile Existing Grade At Construction Centerline", between the bridge abutments. Beyond the bridge abutments, the same approach profile was used as for Cross-Section 13.41

As a matter of interest, it should be noted that the existing detour road, along the downstream side of the bridge, creates a raised obstruction to flow at the west bridge abutment. It is not known whether this will be removed when the bridge is opened to traffic. As a conservative assumption (for backwater conditions), this obstruction was modeled as it presently exists. This did, however, create a small problem in the hydraulic calculations for the bridge; the HEC-2 model indicated negative energy losses were occurring through the bridge. When this

cross-section was replaced with that used for the upstream side of the bridge, this problem was eliminated. However, the impact on water surface elevations was found to be insignificant.

5. Due to the narrow floodplain constriction that will be created by the bridge (and its approaches), modeling revisions were required to block out non-effective flow areas both upstream and downstream of the bridge.

Contraction of flow into the bridge opening was modeled by applying a 1:1 contraction ratio, extending upstream from the east side of the bridge. This line was extended upstream until it intersected high ground along the east bank of the river. Since the western abutment of the bridge is located at the high point of the river bank, no contraction or expansion limits were required for the west side.

As flow exits the bridge opening, it was assumed to expand at a 4:1 ratio. This line was extended downstream until it intersected high ground along the east side of the river.

All cross-sectional area east of these contraction/expansion limits was eliminated from the model. Contraction and expansion energy loss coefficients of 0.3 and 0.5, respectively, were used through the bridge and to the upstream limit of contracted flow.

6. The elevation data used for the bridge design was based on the U.S. National Geodetic Survey Datum. Efforts to verify the datum used for the floodplain topographic maps were unsuccessful. However, a comparison of plotted cross-sections in the vicinity

of the bridge revealed very good correlation between bridge plans and floodplain maps. Accordingly, it was assumed the survey datums were the same.

7. The Corps' HEC-2 model references all cross-sectional geometry to the river thalweg, which is identified as Station 10,000. Based on an approximate plot of the bridge location on the floodplain topographic maps, a thalweg intersection with the bridge was identified. Accordingly, all cross-sectional geometry for the two bridge cross-sections is referenced to a thalweg station of 10,000.

Other than the listed modeling revisions to simulate the impact of the Olive Avenue Bridge, no other major changes were made to the existing Corps' HEC-2 model. Minor changes included the removal of a small area of right overbank flow at Cross-Section 13.004. This was a small depressed area behind a high bank and it did not appear likely that water would effectively flow through this area. Adjustments were also made to Cross-Sections 14.879, 15.069, and 15.647 to remove some non-effective flow areas along the west edge of the right overbank. These adjustments provide for a more realistic contraction and expansion of flow through these sections. Corps' "n" values were not changed except through the Olive Avenue Bridge, where, as previously stated, a value of 0.030 was used.

Once these changes were completed, the new peak discharge values were input to the model and the Floodplain/Floodway analysis was initiated. As indicated previously, the water surface profile calculations were started at Northern Avenue,

which is one mile downstream of the subject property. This provides a wide buffer to eliminate any errors (due to assumed starting water surface elevations) prior to reaching Olive Avenue. Calculations were initiated with the slope/area option for the Floodplain run and with an assumed water surface elevation of 1061.75' for the Floodway run. Due to this assumption, the Floodway boundary is only very approximate at Cross-Section 12.357 (Northern Avenue) and was, therefore, not plotted on Plate 1.

Using recommended FEMA criteria, an initial Floodway run was made using Method 4 (see Floodway Encroachment Calculations, HEC-2 Users Manual) to identify Floodplain encroachment limits that would cause no more that a 1.00 foot rise above the 100-year Floodplain water surface elevation at any cross-section within the study reach. Discussions with both the Town of Youngtown and the Flood Control District of Maricopa County indicate that both agencies still adhere to the one-foot rise criteria in establishing Floodway limits.

The results of this initial run were reviewed and then adjustments made to some encroachment stations in order to limit the maximum increase in water surface elevation (due to Floodway encroachments) to no more than 1.00 feet. Several additional computer runs and encroachment revisions were made in arriving at a Floodway boundary that appeared reasonable and met the maximum 1.00 foot rise criteria. The final Floodway run used a combination of Method 1 and Method 4 encroachment criteria.

Plate 1 is an aerial photograph (June 28, 1987) illustrating the boundaries of the estimated 100-year Floodplain and Floodway in relation to the subject property. HEC-2 cross-section locations are also shown on this Plate.

A review of Plate 1 indicates the revised Floodway boundaries are relatively smooth except for an abrupt change between Cross-Sections 13.932 and 14.122. This probably occurs in response to the major floodplain constriction created by the new Olive Avenue Bridge.

The Floodplain/Floodway boundaries shown on Plate 1 should be considered approximate, since there is a 4-year difference between the photo date and the date of the topographic maps used for the water surface profile analysis. As a result, any development that may be visible on the photograph that may have occurred since April 19, 1983 would not be reflected in the hydraulic calculations, i.e., the Floodplain/Floodway lines shown on the aerial photograph reflect topographic conditions that existed on April 19, 1983.

Under FEMA criteria, no encroachments are allowed to occur within an adopted Floodway. Any development within the Floodplain Fringe (area between the Floodway and Floodplain boundaries) must have finished floors elevated at least 1.00 feet above the 100-year Floodplain elevation. These criteria are subject to change as part of local floodplain regulatory agency policies.

Table 4.1 is a summary of Floodplain and Floodway elevations for both existing conditions and the condition resulting from construction of the new Waddell Dam. Standard HEC-2 "Floodway Summary" data is presented as part of Appendices A and B for "existing" and "new" Waddell Dam conditions, respectively.

Table 4.2 presents a summary of approximate acreages of the subject property that are estimated to remain with the 100-year Floodplain and Floodway upon completion of the new Waddell Dam. These figures are based on the engineering analysis presented in this report. Although a substantial portion of the property will remain within the 100-year Floodplain, the depths of inundation will be decreased as indicated in Table 4.1. More importantly, Table 4.2 indicates a significant decrease in the amount of property that will remain in the Floodway.

Acreages shown in Table 4.2 were planimetered from the 1"=400' topographic base maps provided by the Flood Control District of Maricopa County. Since there were no section corners specifically identified on these maps, the east and west boundaries of the subject 160 acre parcel were located in relation to the centerline of El Mirage Road, which was shown on the maps. Accordingly, the west and east boundaries of the property were plotted at 3/4 mile and 1 mile, respectively, east of El Mirage Road.

In reviewing the topographic maps and aerial photographs of the property, two north/south dirt trails were noted in the vicinity of the property. These roads are about 1/4 mile apart and are located within approximately 100 feet of the subject

TABLE 4.1
SUMMARY OF FLOODPLAIN/FLOODWAY DATA
EXISTING WADDELL DAM vs NEW WADDELL DAM
100-YEAR FLOOD
Agua Fria River

	Existing Floodplain Elevations (ft MSL)			Floodway Widths (ft)		
Cross-Section	Existing Waddell	New Waddell	Difference (ft)	Existing Waddell	New Waddell	Difference (ft)
(Northern Avenue)						
12.470	1064.59	1063.02	1.57	1778	760	1018
12.584	1067.33	1066.30	1.03	2023	926	1097
12.698	1068.88	1067.78	1.10	2359	1055	1304
12.811	1071.75	1069.49	2.26	1905	739	1166
13.004	1074.91	1073.98	.93	2276	1164	1112
13.175	1076.08	1075.45	.63	2300	967	1333
13.364	1078.19	1077.67	.52	2316	1129	1187
13.410	------	1078.07	----	-----	1150	----
(New Bridge Olive Avenue)						
13.420	------	1078.29	----	-----	1466	----
13.554	1080.05	1079.18	.87	2441	1539	902
13.743	1081.97	1080.84	1.13	3051	1514	1537
13.932	1086.98	1085.52	1.46	3390	1454	1936
14.122	1089.18	1087.83	1.35	2931	2527	404
14.311	1092.08	1091.01	1.07	3120	2298	822
14.501	1095.41	1094.24	1.17	2605	2018	587
(Peoria Avenue)	-------	--------	----	-----	-----	----
14.690	1098.83	1097.46	1.37	2510	1656	854
14.879	1101.53	1099.99	1.54	2753	1922	831
15.069	1103.04	1101.46	1.58	2474	1720	754
15.258	1104.56	1103.11	1.45	2091	1777	314
15.454	1108.96	1107.18	1.78	2116	2113	3
(Cactus Road)	-------	--------	----	-----	-----	----
15.647	1111.39	1109.72	1.67	2258	2160	98

TABLE 4.2
SUMMARY OF PROPERTY AREAS
LOCATED WITHIN THE 100-YEAR FLOODPLAIN & FLOODWAY
(Olive Avenue to Peoria Avenue)
Agua Fria River

Floodplain Designation	Inundated Property Area (acres) *1 With Existing Waddell Dam	With New Waddell Dam
100-Year Floodplain	160	125
100-Year Floodway	83	17

*1 Total parcel size is approximately 160 acres.
Areas were planimetered from a 1"=400' topographic map.

parcel boundaries. Accordingly, these trails may represent the approximate boundaries of the property. However, with no way to confirm this information, the boundaries referenced to El Mirage Road were considered to be more reliable for the purpose of this study. If the dirt trails were used as the property boundaries, there would be approximately 6.5 additional acres (beyond those shown in Table 4.2) remaining in the Floodway with the new Waddell Dam discharges.

V. COST ESTIMATE OF LEVEE SYSTEM

The entire 160 acre parcel (located between Olive Avenue and Peoria Avenue) could be completely removed from both the Floodplain and Floodway through construction of a levee along the western boundary of the property. This levee could be tied to high ground at its northern terminus by connecting it to a ridge along the east edge of the floodplain at Cross-Section 14.879. At its southern end, the levee could be tied to the approach embankment of the new Olive Avenue Bridge.

It is recommended that such a levee incorporate an erosion resistant slope (on the riverside of the embankment) to prevent levee erosion during flooding conditions. This bank stabilization should extend from the crest of the levee to some depth below natural ground to prevent undermining of the levee foundation by scour.

A very approximate estimate of the construction cost of such a levee system is presented in Table 5.1 These costs are based on an earthen levee with a soil cement facing to resist erosion.

TABLE 5.1
ESTIMATE OF MATERIAL QUANTITIES
FOR PROPOSED LEVEE CONSTRUCTION
FROM OLIVE AVENUE TO PEORIA AVENUE
AGUA FRIA RIVER, 100-YEAR FLOOD

XSEC	Reach Length (ft)	Dw (ft)	Dt (ft)	FB (ft)	Ts (ft)	Tf (ft)	Z1	Z2	As (sq ft)	Af (sq ft)	Vs (cy)	Vf (cy)
14.690	1800.00	3.40	15.00	4.00	9.00	6.00	1.00	3.00	201.60	153.92	13440.00	10261.33
14.501	1215.00	1.50	15.00	4.00	9.00	6.00	1.00	3.00	184.50	93.50	8302.50	4207.50
14.311	1040.00	2.19	15.00	4.00	9.00	6.00	1.00	3.00	190.71	113.77	7345.87	4382.34
14.122	1060.00	1.78	15.00	4.00	9.00	6.00	1.00	3.00	187.02	101.50	7342.27	3984.69
13.932	1110.00	3.53	15.00	4.00	9.00	6.00	1.00	3.00	202.77	158.58	8336.10	6519.47
13.743	1180.00	-.61	15.00	4.00	9.00	6.00	1.00	3.00	165.51	43.32	7233.40	1893.43
13.554	1300.00	5.83	15.00	4.00	9.00	6.00	1.00	3.00	223.47	252.24	10759.67	12144.78
TOTAL:	8705.00										62759.80	43393.54

COST SUMMARY

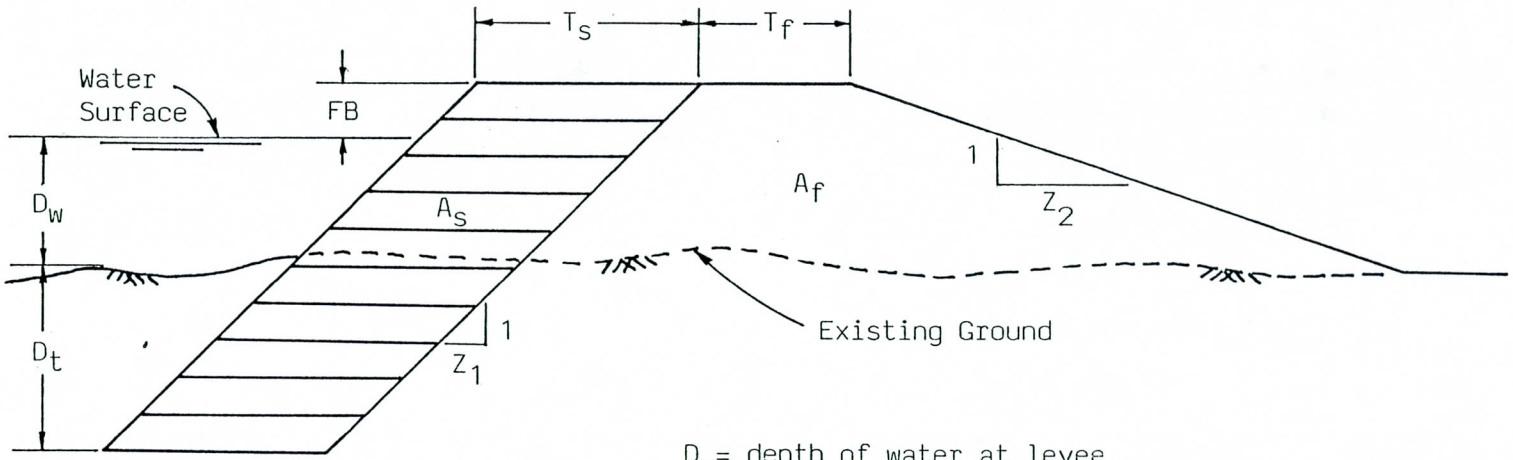
Soil Cement @	$25.00	/c.y.=	$1,568,995
Earth Fill @	$1.50	/c.y.=	$65,090

Total Material Cost: $1,634,085

The data used to generate these costs assume construction of a levee that would provide 4-feet of freeboard above the predicted water surface profile for the 100-year Floodway with the new Waddell Dam in-place (see HEC-2 Floodway Data in Appendix B for water surface elevations). Fifteen feet of soil cement toe-down is provided for scour protection. (Note: This scour dimension is only based on engineering judgement and experience with similar projects, no scour calculations were performed as part of this study. Should such a levee system ever be designed, a complete scour analysis would be mandatory.) The estimated fifteen feet of toe-down provides an allowance for an easterly migration of the main river channel, at which time it would be in contact with the levee and expose the levee system to larger flow depths than it would presently experience in its overbank location.

Figure 5.1 illustrates a typical cross-section of such a levee system. This figure also includes definitions of the symbols/dimensions used in both Table 5.1 and Figure 5.1

Since a small portion of this 160 acre parcel is still estimated to remain in the Floodway (with new Waddell in-place), a Floodway boundary revision would have to be approved before any portion of the proposed levee could be built within the Floodway. It may be possible to mitigate any increase in water surface elevation (due to this Floodway encroachment) by undertaking some channelization work in conjunction with the levee construction. Such channel excavation might serve as a source of borrow for the



D_w= depth of water at levee

D_t= depth of toedown for scour protection

FB = freeboard

T_f= top-width of earth fill

T_s= top-width of soil cement

Z_1= horizontal side-slope component for soil cement

Z_2= horizontal side-slope component for earth fill

A_f= area of earth fill

A_s= area of soil cement

Typical Levee Cross - Section

Figure 5.1

levee embankment and soil cement facing. Any excess excavation could be used as fill to level the ground behind (east of) the levee.

It should be emphasized that the costs presented in Table 5.1 are very preliminary and do not include any allowances for right-of-way acquisition, final design engineering, construction inspection, or contingencies.

VI. SUMMARY

The results of this study indicate that construction of the new Waddell Dam will probably cause a substantial reduction in the peak discharge associated with a 100-year flood on reaches of the Agua Fria River below the dam. In the vicinity of Olive Avenue, the 100-year peak discharge is estimated to change from approximately 100,000 cfs to approximately 64,000 cfs.

Through that reach of the river extending from Northern Avenue to Cactus Road, this decrease in discharge does not appreciably reduce the size of the Floodplain limits, although it does create a significant width reduction in portions of the Floodway. For the 160 acre parcel located between Olive Avenue and Peoria Avenue, it is estimated that this decrease in discharge will remove all but 17 acres of the property from the 100-year Floodway. However, the majority of the parcel (125 acres) will still remain within the 100-year Floodplain.

The Floodplain/Floodway data presented in this report may be subject to change pending completion of a detailed hydrology study (for new Waddell Dam) by the Corps of Engineers. It is estimated that this study will be completed in late 1988.

The Flood Control District of Maricopa County has also retained a consulting engineering firm to prepare a new Floodplain/Floodway study for that reach of the Agua Fria River extending from the Gila River to Waddell Dam. This study, which is estimated to be completed in May 1988, will be based on new (1987) topographic maps of the Agua Fria River. However, it will use the same 100-year peak discharge values previously used by the Corps for the 1984 study. Discussions with Flood Control District representatives indicate they may have the Floodplain/Floodway re-delineated again after the Corps completes (late 1988) the pending hydrology study for the new Waddell Dam.

It concluding, it should be noted that both Floodplain and Floodway boundaries are transient phenomena, i.e., they are subject to change as a function of continued flow within a river system. A major flood is capable of creating dramatic changes to the cross-sectional geometry of a floodplain. These phenomena can be especially destructive to the cross-sectional geometry of the ephemeral streams of the arid southwestern United States. Accordingly, unless measures are taken to stabilize reaches of a river system, Floodway limits (and to a lesser extent, Floodplain limits) are subject to substantial change during major floods.

APPENDIX A

HEC-2 Output Data
Recreation Of Corps Of Engineers' Model For 1984 Conditions
(with existing Waddell Dam)

```
*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*  IBM-PC-XT VERSION AUGUST 1985                    *
*  RUN DATE  09-08-87   TIME  18:42:09                *
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*************************************
*  U.S. ARMY CORPS OF ENGINEERS
*  THE HYDROLOGIC ENGINEERING CENTER
*  609 SECOND STREET, SUITE D
*  DAVIS, CALIFORNIA 95616
  *  (916) 440-2105 (FTS) 448-2105
*************************************
```


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

THIS RUN EXECUTED 09-08-87

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
  IBM-PC-XT VERSION AUGUST 1985
**************************************************


T1 FLOODPLAIN/FLOODWAY MODEL WITH EXISTING WADDELL DAM IN PLACE
T2 NORTHERN AVENUE TO CACTUS ROAD USING 1984 COE HEC-2 MODEL
T3      AGUA FRIA RIVER         CALIBRATION RUN TO RECONSTRUCT COE MODEL

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      1.        2.        0.        0.   .000000       .00        .0        0.  1064.790      .000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1.000      .000    -1.000      .000      .000      .000    -1.000      .000      .000    15.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38.000    43.000    53.000    21.000    55.000    26.000    56.000    22.000    54.000     4.000


     1.000    50.000   200.000      .000      .000      .000      .000      .000      .000      .000


NC      .050      .050      .030      .300      .500      .000      .000      .000      .000      .000
QT     2.000 95800.000 95800.000      .000      .000      .000      .000      .000      .000      .000
NH     5.000      .050  4257.000      .040  8711.000      .045  9082.000      .030 10092.000      .050
NH 11377.000      .000      .000      .000      .000      .000      .000      .000      .000      .000
ET      .000      .000     9.100      .000      .000      .000      .000      .000  7160.000 10093.000
X1    12.357     87.000  9605.000 10092.000   600.000   600.000   600.000      .000      .000      .000
X3    10.000      .000      .000      .000      .000      .000      .000      .000      .000      .000
GR  1088.300  3910.000  1076.200  3988.000  1076.200  4053.000  1075.300  4152.000  1063.300  4222.000
GR  1061.700  4257.000  1060.300  4384.000  1060.300  4579.000  1060.300  4816.000  1060.600  4983.000
GR  1061.100  5243.000  1061.700  5463.000  1062.100  5672.000  1062.700  6060.000  1063.100  6413.000
GR  1061.700  6445.000  1064.500  6465.000  1064.900  6523.000  1064.500  6586.000  1064.600  6755.000
GR  1065.300  6834.000  1063.900  6956.000  1064.500  7086.000  1063.700  7131.000  1063.700  7162.000
GR  1057.400  7184.000  1057.700  7354.000  1057.100  7473.000  1057.500  7517.000  1057.500  7538.000
GR  1063.100  7571.000  1063.400  7614.000  1051.800  7638.000  1051.800  7707.000  1059.500  7733.000
GR  1063.000  7781.000  1054.600  7800.000  1062.700  7808.000  1062.200  7859.000  1060.000  7893.000
GR  1059.200  7908.000  1058.000  7964.000  1056.000  7988.000  1060.000  8039.000  1060.000  8128.000
GR  1059.000  8171.000  1059.000  8207.000  1060.000  8280.000  1064.000  8312.000  1065.000  8711.000
GR  1065.000  8745.000  1064.300  8817.000  1064.300  8915.000  1063.400  8996.000  1065.000  9047.000
GR  1070.300  9082.000  1057.500  9103.000  1056.400  9152.000  1053.500  9187.000  1052.200  9287.000
GR  1052.700  9334.000  1054.600  9354.000  1056.700  9476.000  1057.400  9605.000  1056.000  9722.000
GR  1053.200  9869.000  1057.800  9881.000  1058.300  9910.000  1055.800  9926.000  1057.100  9966.000
GR  1059.000  9976.000  1056.400  9981.000  1056.700 10000.000  1059.100 10010.000  1056.300 10021.000
GR  1054.700 10064.000  1066.000 10092.000  1068.300 10142.000  1069.400 10258.000  1071.000 10375.000
GR  1071.000 10490.000  1073.200 10594.000  1073.900 10703.000  1075.800 10848.000  1077.800 10984.000
GR  1080.300 11187.000  1086.800 11377.000      .000      .000      .000      .000      .000      .000
```

QT	2.000	96150.000	96150.000	.000	.000	.000	.000	.000	.000	.000
NC	.000	.000	.000	.100	.300	.000	.000	.000	.000	.000
NH	6.000	.040	8453.000	.045	8552.000	.060	8907.000	.045	9340.000	.030
NH	10205.000	.035	11470.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	7440.000	10206.000
X1	12.470	64.000	9340.000	10205.000	600.000	600.000	600.000	.000	.000	.000
GR	1078.900	4130.000	1075.100	4237.000	1069.900	4363.000	1066.100	4523.000	1064.500	4597.000
GR	1063.400	4633.000	1063.100	4653.000	1062.300	4758.000	1063.000	4969.000	1063.400	5261.000
GR	1064.200	5650.000	1064.200	5873.000	1065.000	6072.000	1065.100	6332.000	1065.300	6644.000
GR	1066.300	6959.000	1066.700	7235.000	1066.500	7333.000	1066.500	7365.000	1065.700	7445.000
GR	1060.900	7469.000	1060.900	7554.000	1060.900	7643.000	1060.900	7676.000	1062.100	7684.000
GR	1065.400	7775.000	1065.400	7889.000	1065.000	7940.000	1061.800	8011.000	1064.600	8027.000
GR	1063.400	8117.000	1060.000	8231.000	1060.000	8351.000	1060.000	8453.000	1061.600	8486.000
GR	1065.500	8552.000	1066.300	8688.000	1066.800	8907.000	1067.400	9094.000	1067.900	9141.000
GR	1066.000	9251.000	1065.000	9340.000	1058.000	9389.000	1057.100	9506.000	1055.600	9559.000
GR	1063.600	9584.000	1056.600	9606.000	1055.200	9789.000	1056.800	9888.000	1055.500	9906.000
GR	1055.800	9926.000	1058.400	9934.000	1059.100	10000.000	1058.300	10118.000	1056.200	10190.000
GR	1067.900	10205.000	1069.400	10391.000	1070.300	10580.000	1072.300	10779.000	1074.300	10935.000
GR	1076.300	11112.000	1076.800	11253.000	1078.400	11383.000	1082.000	11470.000	.000	.000

QT	2.000	96750.000	96750.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.040	7499.000	.045	9450.000	.030	10416.000	.035	11485.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	7810.000	10417.000
X1	12.584	71.000	9450.000	10416.000	600.000	600.000	600.000	.000	.000	.000
GR	1081.000	4610.000	1075.900	4712.000	1073.800	4785.000	1070.100	4860.000	1068.500	4925.000
GR	1064.600	4959.000	1065.100	4985.000	1064.900	5212.000	1064.900	5345.000	1065.900	5561.000
GR	1065.900	5778.000	1065.900	5935.000	1065.900	6079.000	1066.900	6248.000	1066.900	6324.000
GR	1067.700	6479.000	1067.900	6587.000	1068.100	6657.000	1068.100	6740.000	1068.100	6852.000
GR	1068.100	6932.000	1068.100	7041.000	1068.300	7223.000	1068.300	7346.000	1068.200	7499.000
GR	1068.900	7626.000	1067.400	7718.000	1069.300	7808.000	1069.400	7890.000	1062.900	7925.000
GR	1063.300	7966.000	1063.300	8030.000	1065.400	8038.000	1065.000	8092.000	1066.200	8171.000
GR	1065.400	8288.000	1064.000	8330.000	1062.400	8396.000	1061.500	8424.000	1062.600	8491.000
GR	1062.800	8620.000	1061.100	8659.000	1064.300	8701.000	1067.000	8789.000	1068.200	9040.000
GR	1068.300	9265.000	1066.200	9450.000	1057.400	9483.000	1057.000	9588.000	1059.000	9621.000
GR	1057.000	9669.000	1059.100	9751.000	1059.100	9858.000	1058.000	9883.000	1057.400	9979.000
GR	1059.500	10000.000	1060.000	10113.000	1062.400	10171.000	1061.000	10228.000	1061.000	10317.000
GR	1054.600	10334.000	1055.000	10357.000	1068.300	10378.000	1068.300	10416.000	1071.000	10464.000
GR	1071.100	10609.000	1072.600	10782.000	1073.800	10945.000	1074.700	11091.000	1077.100	11301.000
GR	1078.800	11485.000	.000	.000	.000	.000	.000	.000	.000	.000

QT	2.000	96850.000	96850.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.040	7398.000	.045	9467.000	.030	10539.000	.035	10574.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	8100.000	10540.000
X1	12.698	79.000	9467.000	10539.000	600.000	600.000	600.000	.000	.000	.000
GR	1080.500	4711.000	1078.500	4833.000	1076.600	4921.000	1073.900	5025.000	1072.900	5067.000
GR	1072.200	5094.000	1069.000	5116.000	1068.800	5166.000	1068.800	5221.000	1068.800	5235.000
GR	1067.700	5252.000	1068.100	5331.000	1067.700	5442.000	1068.600	5628.000	1068.600	5788.000
GR	1069.000	5963.000	1069.000	6151.000	1069.000	6322.000	1069.000	6516.000	1069.300	6754.000
GR	1069.300	6866.000	1069.500	6877.000	1070.300	6883.000	1070.100	6956.000	1070.300	7084.000
GR	1069.800	7183.000	1069.000	7229.000	1070.100	7254.000	1069.100	7284.000	1069.700	7398.000
GR	1069.700	7575.000	1069.700	7601.000	1072.700	7614.000	1069.800	7626.000	1069.800	7744.000
GR	1069.800	7828.000	1067.900	7859.000	1067.300	7962.000	1067.300	8043.000	1063.400	8060.000
GR	1065.000	8070.000	1066.900	8078.000	1067.300	8108.000	1066.500	8142.000	1067.000	8171.000

GR	1070.600	8213.000	1071.400	8222.000	1064.800	8343.000	1064.800	8448.000	1065.500	8572.000
GR	1065.400	8637.000	1064.800	8691.000	1065.800	8735.000	1066.800	8780.000	1064.700	8835.000
GR	1067.900	8898.000	1068.400	9001.000	1068.400	9117.000	1068.600	9257.000	1068.400	9467.000
GR	1065.100	9514.000	1057.800	9531.000	1058.600	9659.000	1061.500	9670.000	1061.500	9699.000
GR	1058.200	9744.000	1059.600	9789.000	1061.800	9823.000	1062.300	9917.000	1058.300	9975.000
GR	1058.300	10000.000	1060.400	10049.000	1062.600	10140.000	1063.400	10294.000	1062.600	10396.000
GR	1062.600	10462.000	1065.000	10513.000	1074.200	10539.000	1074.200	10574.000	.000	.000
QT	2.000	97200.000	97200.000	.000	.000	.000	.000	.000	.000	.000
NH	3.000	.040	7334.000	.045	9551.000	.030	10351.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	8000.000	10351.000
X1	12.811	70.000	9551.000	10351.000	600.000	600.000	600.000	.000	.000	.000
GR	1089.700	5035.000	1089.000	5118.000	1089.000	5240.000	1075.900	5274.000	1074.200	5297.000
GR	1073.700	5328.000	1070.600	5361.000	1070.600	5447.000	1070.600	5498.000	1070.600	5517.000
GR	1070.600	5602.000	1070.100	5686.000	1070.300	5844.000	1070.300	6001.000	1070.300	6163.000
GR	1070.300	6376.000	1070.900	6517.000	1070.500	6643.000	1070.500	6782.000	1070.900	6967.000
GR	1070.900	7016.000	1071.000	7134.000	1071.300	7334.000	1071.000	7465.000	1071.300	7595.000
GR	1071.100	7745.000	1071.100	7885.000	1071.100	7906.000	1071.100	7929.000	1071.100	8012.000
GR	1073.900	8024.000	1073.300	8044.000	1073.000	8063.000	1073.300	8120.000	1071.700	8149.000
GR	1071.100	8192.000	1071.700	8218.000	1073.700	8236.000	1073.000	8278.000	1071.100	8299.000
GR	1071.100	8308.000	1071.100	8319.000	1071.100	8333.000	1075.800	8351.000	1071.000	8385.000
GR	1071.000	8399.000	1068.200	8424.000	1068.200	8489.000	1069.400	8591.000	1067.400	8650.000
GR	1066.300	8781.000	1067.800	8928.000	1068.800	9090.000	1069.600	9263.000	1070.300	9434.000
GR	1071.200	9551.000	1066.200	9581.000	1064.800	9615.000	1061.100	9631.000	1063.600	9704.000
GR	1061.000	9764.000	1061.400	9895.000	1060.400	9984.000	1061.500	10000.000	1063.000	10122.000
GR	1065.800	10214.000	1065.400	10290.000	1077.900	10321.000	1079.600	10340.000	1080.600	10351.000
NC	.040	.040	.040	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	8000.000	10300.000
X1	13.004	95.000	9793.000	10299.000	1020.000	1020.000	1020.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1103.000	5621.000	1103.000	5660.000	1098.000	5686.000	1100.000	5702.000	1099.000	5739.000
GR	1102.000	5769.000	1095.000	5799.000	1088.000	5841.000	1089.000	5874.000	1085.000	5912.000
GR	1085.000	5938.000	1084.000	5977.000	1085.000	6050.000	1084.000	6138.000	1083.000	6160.000
GR	1075.000	6192.000	1075.000	6225.000	1074.000	6252.000	1074.000	6289.000	1073.000	6339.000
GR	1071.000	6392.000	1071.000	6488.000	1071.000	6569.000	1071.000	6689.000	1071.000	6792.000
GR	1071.000	6905.000	1071.000	7030.000	1071.000	7121.000	1073.000	7202.000	1073.000	7220.000
GR	1071.000	7302.000	1071.000	7393.000	1071.000	7519.000	1071.000	7620.000	1070.000	7698.000
GR	1070.000	7788.000	1070.000	7879.000	1070.000	7960.000	1070.000	8027.000	1070.000	8100.000
GR	1069.000	8146.000	1071.000	8188.000	1071.000	8224.000	1071.000	8261.000	1072.000	8299.000
GR	1068.000	8306.000	1071.000	8323.000	1067.000	8342.000	1070.000	8379.000	1070.000	8414.000
GR	1070.000	8471.000	1070.000	8518.000	1070.000	8566.000	1071.000	8615.000	1071.000	8660.000
GR	1071.000	8714.000	1070.000	8768.000	1071.000	8814.000	1069.000	8860.000	1069.000	8917.000
GR	1072.000	8970.000	1070.000	9030.000	1070.000	9084.000	1071.000	9148.000	1071.000	9210.000
GR	1071.000	9273.000	1067.000	9300.000	1068.000	9337.000	1069.000	9395.000	1068.000	9443.000
GR	1068.000	9503.000	1069.000	9568.000	1070.000	9629.000	1070.000	9687.000	1070.000	9744.000
GR	1070.000	9793.000	1063.000	9810.000	1062.000	9850.000	1060.000	9897.000	1061.000	9935.000
GR	1070.000	9949.000	1061.000	9967.000	1061.000	10000.000	1061.000	10045.000	1061.000	10084.000
GR	1061.000	10138.000	1061.000	10198.000	1061.000	10255.000	1074.000	10270.000	1081.000	10299.000
GR	1079.000	10319.000	1077.000	10353.000	1073.000	10392.000	1073.000	10430.000	1073.000	10452.000

ET	.000	.000	9.100	.000	.000	.000	.000	.000	8000.000	10312.000
X1	13.175	90.000	9726.000	10311.000	900.000	900.000	900.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1086.000	6185.000	1084.000	6232.000	1083.000	6256.000	1082.000	6269.000	1080.000	6287.000
GR	1080.000	6351.000	1079.000	6427.000	1076.000	6453.000	1077.000	6467.000	1077.000	6481.000
GR	1075.000	6520.000	1075.000	6547.000	1075.000	6601.000	1074.000	6677.000	1074.000	6689.000
GR	1075.000	6708.000	1073.000	6719.000	1073.000	6746.000	1073.000	6838.000	1073.000	6907.000
GR	1073.000	6991.000	1073.000	7080.000	1073.000	7176.000	1073.000	7267.000	1073.000	7337.000
GR	1073.000	7427.000	1073.000	7510.000	1073.000	7592.000	1073.000	7683.000	1073.000	7748.000
GR	1073.000	7835.000	1073.000	7900.000	1073.000	7972.000	1073.000	8023.000	1073.000	8058.000
GR	1072.000	8108.000	1071.000	8133.000	1072.000	8168.000	1072.000	8192.000	1071.000	8239.000
GR	1073.000	8288.000	1073.000	8333.000	1072.000	8378.000	1072.000	8417.000	1072.000	8468.000
GR	1073.000	8495.000	1073.000	8513.000	1074.000	8567.000	1074.000	8608.000	1073.000	8643.000
GR	1071.000	8680.000	1072.000	8730.000	1072.000	8775.000	1072.000	8833.000	1074.000	8880.000
GR	1074.000	8921.000	1072.000	8968.000	1073.000	9027.000	1073.000	9082.000	1073.000	9112.000
GR	1074.000	9163.000	1070.000	9178.000	1069.000	9219.000	1069.000	9271.000	1071.000	9318.000
GR	1071.000	9358.000	1071.000	9411.000	1072.000	9470.000	1072.000	9525.000	1072.000	9588.000
GR	1071.000	9639.000	1071.000	9679.000	1071.000	9726.000	1068.000	9741.000	1066.000	9760.000
GR	1062.000	9786.000	1064.000	9819.000	1064.000	9879.000	1064.000	9949.000	1064.000	10000.000
GR	1064.000	10021.000	1064.000	10060.000	1064.000	10094.000	1066.000	10135.000	1067.000	10180.000
GR	1067.000	10229.000	1066.000	10281.000	1083.000	10311.000	1079.000	10329.000	1080.000	10355.000
QT	2.000	99000.000	99000.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	10900.000	8185.000	10525.000
X1	13.364	90.000	9373.000	10524.000	1000.000	1000.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1092.000	6497.000	1096.000	6546.000	1099.000	6600.000	1099.000	6658.000	1099.000	6703.000
GR	1097.000	6762.000	1093.000	6814.000	1089.000	6868.000	1084.000	6920.000	1079.000	6967.000
GR	1077.000	6997.000	1077.000	7019.000	1076.000	7031.000	1075.000	7073.000	1075.000	7142.000
GR	1075.000	7213.000	1076.000	7287.000	1076.000	7359.000	1076.000	7427.000	1076.000	7496.000
GR	1076.000	7571.000	1076.000	7637.000	1076.000	7708.000	1076.000	7780.000	1076.000	7841.000
GR	1076.000	7902.000	1076.000	7918.000	1076.000	7952.000	1076.000	8021.000	1075.000	8057.000
GR	1075.000	8132.000	1075.000	8187.000	1075.000	8237.000	1074.000	8279.000	1076.000	8320.000
GR	1076.000	8373.000	1075.000	8421.000	1075.000	8448.000	1075.000	8498.000	1076.000	8543.000
GR	1075.000	8587.000	1076.000	8638.000	1076.000	8695.000	1076.000	8749.000	1078.000	8797.000
GR	1079.000	8838.000	1074.000	8849.000	1074.000	8859.000	1078.000	8877.000	1076.000	8895.000
GR	1074.000	8933.000	1074.000	8982.000	1074.000	9038.000	1073.000	9055.000	1072.000	9119.000
GR	1072.000	9173.000	1072.000	9224.000	1072.000	9281.000	1074.000	9342.000	1074.000	9373.000
GR	1071.000	9409.000	1070.000	9430.000	1065.000	9471.000	1066.000	9503.000	1065.000	9549.000
GR	1066.000	9610.000	1068.000	9624.000	1068.000	9698.000	1069.000	9754.000	1069.000	9819.000
GR	1069.000	9878.000	1069.000	9940.000	1069.000	10000.000	1069.000	10010.000	1068.000	10044.000
GR	1068.000	10097.000	1069.000	10145.000	1070.000	10198.000	1070.000	10259.000	1070.000	10295.000
GR	1073.000	10309.000	1075.000	10362.000	1075.000	10393.000	1074.000	10414.000	1073.000	10444.000
GR	1073.000	10490.000	1088.000	10524.000	1089.000	10539.000	1081.000	10574.000	1082.000	10618.000
ET	.000	7.100	9.100	.000	.000	.000	.000	10540.000	8100.000	10541.000
X1	13.554	90.000	8805.000	10540.000	1000.000	1000.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1110.000	6310.000	1110.000	6370.000	1100.000	6388.000	1098.000	6427.000	1091.000	6476.000
GR	1089.000	6525.000	1090.000	6560.000	1094.000	6589.000	1103.000	6620.000	1101.000	6649.000
GR	1101.000	6710.000	1101.000	6773.000	1100.000	6839.000	1099.000	6889.000	1094.000	6933.000
GR	1081.000	6975.000	1080.000	7019.000	1081.000	7070.000	1081.000	7128.000	1079.000	7148.000
GR	1080.000	7171.000	1080.000	7240.000	1080.000	7305.000	1081.000	7366.000	1079.000	7379.000

GR	1081.000	7411.000	1081.000	7473.000	1081.000	7536.000	1081.000	7600.000	1081.000	7668.000
GR	1079.000	7721.000	1080.000	7740.000	1081.000	7812.000	1081.000	7899.000	1081.000	7966.000
GR	1081.000	8022.000	1080.000	8067.000	1077.000	8085.000	1079.000	8110.000	1079.000	8134.000
GR	1072.000	8150.000	1070.000	8188.000	1071.000	8236.000	1075.000	8266.000	1076.000	8308.000
GR	1071.000	8331.000	1073.000	8361.000	1075.000	8390.000	1075.000	8448.000	1077.000	8518.000
GR	1077.000	8597.000	1076.000	8676.000	1076.000	8735.000	1077.000	8805.000	1076.000	8870.000
GR	1076.000	8923.000	1071.000	8949.000	1071.000	9001.000	1071.000	9060.000	1070.000	9109.000
GR	1069.000	9170.000	1070.000	9236.000	1069.000	9293.000	1071.000	9337.000	1072.000	9397.000
GR	1073.000	9454.000	1073.000	9512.000	1073.000	9581.000	1074.000	9656.000	1074.000	9719.000
GR	1074.000	9778.000	1074.000	9846.000	1074.000	9899.000	1073.000	10000.000	1069.000	10068.000
GR	1068.000	10114.000	1070.000	10175.000	1069.000	10234.000	1069.000	10300.000	1069.000	10344.000
GR	1069.000	10398.000	1067.000	10428.000	1068.000	10519.000	1080.000	10540.000	1080.000	10541.000
GR	1080.000	10835.000	1080.000	10836.000	1083.000	10876.000	1083.000	10919.000	1087.000	10940.000
QT	2.000	100000.000	100000.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	7225.000	10740.000
X1	13.743	95.000	9209.000	10739.000	1000.000	1000.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1101.000	6777.000	1099.000	6806.000	1101.000	6828.000	1105.000	6848.000	1084.000	6888.000
GR	1082.000	6899.000	1082.000	6928.000	1083.000	6979.000	1084.000	7009.000	1084.000	7052.000
GR	1085.000	7072.000	1085.000	7092.000	1085.000	7131.000	1085.000	7155.000	1085.000	7188.000
GR	1085.000	7222.000	1083.000	7268.000	1083.000	7301.000	1082.000	7344.000	1078.000	7356.000
GR	1078.000	7368.000	1080.000	7396.000	1082.000	7430.000	1084.000	7468.000	1084.000	7509.000
GR	1084.000	7545.000	1085.000	7589.000	1081.000	7605.000	1081.000	7644.000	1082.000	7679.000
GR	1082.000	7724.000	1083.000	7772.000	1083.000	7818.000	1079.000	7836.000	1079.000	7847.000
GR	1082.000	7876.000	1082.000	7921.000	1082.000	7968.000	1078.000	7997.000	1080.000	8028.000
GR	1081.000	8069.000	1083.000	8111.000	1082.000	8154.000	1082.000	8209.000	1082.000	8261.000
GR	1082.000	8536.000	1081.000	8592.000	1081.000	8657.000	1080.000	8724.000	1081.000	8763.000
GR	1081.000	8795.000	1081.000	8856.000	1081.000	8917.000	1079.000	8956.000	1079.000	8969.000
GR	1079.000	9016.000	1080.000	9059.000	1081.000	9081.000	1082.000	9118.000	1081.000	9165.000
GR	1081.000	9209.000	1076.000	9229.000	1076.000	9266.000	1077.000	9314.000	1077.000	9375.000
GR	1077.000	9435.000	1078.000	9498.000	1078.000	9563.000	1078.000	9627.000	1078.000	9685.000
GR	1078.000	9744.000	1077.000	9801.000	1074.000	9837.000	1074.000	9889.000	1076.000	9949.000
GR	1076.000	10000.000	1076.000	10062.000	1075.000	10126.000	1078.000	10148.000	1080.000	10180.000
GR	1079.000	10241.000	1079.000	10302.000	1076.000	10324.000	1076.000	10375.000	1073.000	10396.000
GR	1073.000	10460.000	1076.000	10500.000	1077.000	10551.000	1076.000	10608.000	1074.000	10649.000
GR	1073.000	10681.000	1077.000	10708.000	1086.000	10739.000	1089.000	10786.000	1090.000	10835.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	7100.000	10620.000
X1	13.932	95.000	9377.000	10619.000	1000.000	1000.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1088.000	6518.000	1086.000	6548.000	1085.000	6583.000	1084.000	6624.000	1086.000	6648.000
GR	1086.000	6682.000	1083.000	6720.000	1083.000	6760.000	1083.000	6808.000	1085.000	6845.000
GR	1086.000	6895.000	1086.000	6932.000	1086.000	6986.000	1085.000	7023.000	1086.000	7039.000
GR	1087.000	7080.000	1088.000	7117.000	1088.000	7170.000	1088.000	7224.000	1085.000	7240.000
GR	1085.000	7279.000	1084.000	7321.000	1082.000	7341.000	1083.000	7355.000	1085.000	7372.000
GR	1086.000	7390.000	1086.000	7435.000	1086.000	7494.000	1085.000	7544.000	1085.000	7585.000
GR	1086.000	7627.000	1086.000	7676.000	1086.000	7725.000	1086.000	7774.000	1085.000	7818.000
GR	1085.000	7861.000	1085.000	7921.000	1086.000	7976.000	1086.000	8137.000	1085.000	8191.000
GR	1084.000	8241.000	1083.000	8287.000	1083.000	8331.000	1081.000	8379.000	1080.000	8400.000
GR	1080.000	8587.000	1083.000	8636.000	1083.000	8687.000	1082.000	8749.000	1083.000	8811.000
GR	1083.000	8868.000	1079.000	8895.000	1080.000	8919.000	1084.000	8932.000	1084.000	8980.000
GR	1084.000	9034.000	1084.000	9107.000	1084.000	9171.000	1084.000	9260.000	1083.000	9331.000
GR	1083.000	9377.000	1079.000	9386.000	1080.000	9435.000	1080.000	9500.000	1080.000	9578.000

GR	1080.000	9643.000	1079.000	9680.000	1075.000	9696.000	1075.000	9760.000	1077.000	9838.000
GR	1079.000	9890.000	1078.000	9939.000	1077.000	10000.000	1077.000	10050.000	1077.000	10110.000
GR	1078.000	10167.000	1078.000	10230.000	1079.000	10289.000	1080.000	10322.000	1080.000	10357.000
GR	1080.000	10412.000	1080.000	10465.000	1079.000	10502.000	1078.000	10558.000	1080.000	10588.000
GR	1085.000	10619.000	1085.000	10640.000	1085.000	10696.000	1085.000	10739.000	1085.000	10786.000
GR	1086.000	10839.000	1090.000	10880.000	1092.000	10936.000	1090.000	10978.000	1090.000	11001.000
QT	2.000	101000.000	101000.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	7575.000	10716.000
X1	14.122	95.000	9486.000	10715.000	900.000	1050.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1113.000	6146.000	1113.000	6182.000	1097.000	6217.000	1089.000	6254.000	1084.000	6289.000
GR	1084.000	6315.000	1087.000	6333.000	1087.000	6397.000	1086.000	6463.000	1087.000	6527.000
GR	1086.000	6580.000	1086.000	6631.000	1085.000	6684.000	1084.000	6743.000	1084.000	6805.000
GR	1083.000	6873.000	1082.000	6946.000	1081.000	7011.000	1081.000	7061.000	1091.000	7076.000
GR	1085.000	7094.000	1086.000	7142.000	1086.000	7194.000	1087.000	7271.000	1087.000	7340.000
GR	1086.000	7400.000	1087.000	7459.000	1087.000	7526.000	1088.000	7575.000	1087.000	7632.000
GR	1087.000	7670.000	1084.000	7692.000	1085.000	7736.000	1085.000	7792.000	1085.000	7858.000
GR	1085.000	7927.000	1085.000	7992.000	1085.000	8047.000	1086.000	8088.000	1088.000	8128.000
GR	1087.000	8175.000	1087.000	8224.000	1088.000	8287.000	1088.000	8353.000	1087.000	8421.000
GR	1087.000	8491.000	1087.000	8542.000	1087.000	8603.000	1087.000	8664.000	1086.000	8723.000
GR	1086.000	8786.000	1086.000	8846.000	1085.000	8893.000	1085.000	8953.000	1087.000	9000.000
GR	1087.000	9061.000	1088.000	9134.000	1088.000	9208.000	1090.000	9273.000	1091.000	9330.000
GR	1091.000	9403.000	1091.000	9458.000	1080.000	9486.000	1080.000	9552.000	1080.000	9614.000
GR	1081.000	9662.000	1082.000	9714.000	1082.000	9780.000	1082.000	9839.000	1084.000	9878.000
GR	1084.000	9920.000	1084.000	9973.000	1084.000	10000.000	1084.000	10027.000	1084.000	10071.000
GR	1084.000	10110.000	1084.000	10171.000	1084.000	10232.000	1083.000	10290.000	1084.000	10334.000
GR	1083.000	10369.000	1081.000	10392.000	1082.000	10426.000	1081.000	10479.000	1081.000	10510.000
GR	1086.000	10531.000	1084.000	10549.000	1084.000	10566.000	1087.000	10580.000	1086.000	10629.000
GR	1084.000	10671.000	1084.000	10695.000	1091.000	10715.000	1091.000	10764.000	1091.000	10789.000
QT	2.000	102500.000	102500.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	8230.000	11350.000
X1	14.311	95.000	9387.000	10648.000	800.000	1200.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1110.000	6427.000	1089.000	6477.000	1090.000	6541.000	1090.000	6598.000	1091.000	6661.000
GR	1089.000	6725.000	1088.000	6771.000	1088.000	6830.000	1087.000	6855.000	1089.000	6881.000
GR	1091.000	6944.000	1090.000	7011.000	1089.000	7082.000	1088.000	7125.000	1089.000	7161.000
GR	1092.000	7193.000	1087.000	7216.000	1089.000	7249.000	1089.000	7314.000	1088.000	7367.000
GR	1089.000	7419.000	1089.000	7451.000	1089.000	7514.000	1090.000	7586.000	1090.000	7654.000
GR	1090.000	7712.000	1090.000	7778.000	1090.000	7839.000	1090.000	7911.000	1091.000	7980.000
GR	1091.000	8043.000	1090.000	8104.000	1090.000	8140.000	1091.000	8201.000	1090.000	8254.000
GR	1091.000	8313.000	1090.000	8354.000	1087.000	8370.000	1087.000	8431.000	1088.000	8491.000
GR	1088.000	8558.000	1087.000	8602.000	1090.000	8623.000	1090.000	8919.000	1091.000	8976.000
GR	1091.000	9099.000	1090.000	9162.000	1090.000	9221.000	1088.000	9266.000	1087.000	9303.000
GR	1089.000	9345.000	1090.000	9387.000	1085.000	9427.000	1082.000	9459.000	1082.000	9517.000
GR	1083.000	9550.000	1087.000	9582.000	1086.000	9646.000	1085.000	9701.000	1084.000	9726.000
GR	1086.000	9764.000	1088.000	9800.000	1088.000	9844.000	1087.000	9894.000	1088.000	9923.000
GR	1089.000	9951.000	1089.000	10000.000	1088.000	10032.000	1087.000	10066.000	1087.000	10102.000
GR	1087.000	10161.000	1087.000	10213.000	1086.000	10266.000	1085.000	10303.000	1086.000	10353.000
GR	1084.000	10393.000	1083.000	10451.000	1083.000	10503.000	1081.000	10531.000	1083.000	10572.000
GR	1086.000	10614.000	1090.000	10648.000	1089.000	10707.000	1089.000	10767.000	1090.000	10821.000
GR	1089.000	10882.000	1089.000	10945.000	1087.000	10998.000	1087.000	11067.000	1087.000	11131.000
GR	1088.000	11179.000	1088.000	11242.000	1088.000	11309.000	1093.000	11343.000	1094.000	11406.000

ET	.000	.000	9.100	.000	.000	.000	.000	.000	8330.000	10935.000
X1	14.501	95.000	9470.000	10585.000	900.000	1200.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1116.000	7112.000	1117.000	7160.000	1117.000	7191.000	1121.000	7218.000	1121.000	7261.000
GR	1106.000	7304.000	1092.000	7347.000	1092.000	7404.000	1093.000	7478.000	1093.000	7553.000
GR	1093.000	7626.000	1091.000	7653.000	1090.000	7678.000	1093.000	7694.000	1093.000	7766.000
GR	1093.000	7812.000	1094.000	7871.000	1094.000	7943.000	1094.000	8002.000	1094.000	8062.000
GR	1094.000	8133.000	1094.000	8203.000	1093.000	8277.000	1093.000	8333.000	1093.000	8406.000
GR	1091.000	8450.000	1094.000	8469.000	1093.000	8518.000	1091.000	8572.000	1091.000	8611.000
GR	1089.000	8653.000	1089.000	8682.000	1092.000	8709.000	1093.000	8778.000	1093.000	8839.000
GR	1094.000	8891.000	1094.000	8940.000	1095.000	9000.000	1092.000	9035.000	1093.000	9090.000
GR	1092.000	9131.000	1090.000	9144.000	1092.000	9183.000	1092.000	9247.000	1094.000	9309.000
GR	1094.000	9372.000	1094.000	9423.000	1095.000	9470.000	1091.000	9489.000	1091.000	9553.000
GR	1091.000	9623.000	1091.000	9687.000	1091.000	9753.000	1091.000	9812.000	1091.000	9873.000
GR	1091.000	9916.000	1088.000	9971.000	1088.000	10000.000	1088.000	10053.000	1089.000	10101.000
GR	1089.000	10152.000	1085.000	10206.000	1085.000	10273.000	1085.000	10329.000	1084.000	10382.000
GR	1085.000	10409.000	1089.000	10460.000	1089.000	10526.000	1090.000	10585.000	1089.000	10611.000
GR	1089.000	10680.000	1089.000	10756.000	1089.000	10824.000	1089.000	10893.000	1089.000	10939.000
GR	1095.000	10952.000	1092.000	10970.000	1092.000	11034.000	1093.000	11092.000	1094.000	11159.000
GR	1094.000	11223.000	1094.000	11290.000	1095.000	11357.000	1096.000	11431.000	1097.000	11504.000
GR	1097.000	11581.000	1097.000	11622.000	1097.000	11654.000	1097.000	11721.000	1097.000	11783.000
GR	1097.000	11843.000	1097.000	11863.000	1097.000	11901.000	1097.000	11936.000	1101.000	11952.000

ET	.000	.000	9.100	.000	.000	.000	.000	.000	8590.000	11100.000
X1	14.690	90.000	9548.000	10545.000	960.000	1000.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1120.000	7915.000	1121.000	7949.000	1122.000	8000.000	1123.000	8051.000	1123.000	8094.000
GR	1124.000	8133.000	1114.000	8165.000	1098.000	8200.000	1098.000	8252.000	1096.000	8273.000
GR	1096.000	8322.000	1096.000	8346.000	1096.000	8389.000	1096.000	8443.000	1097.000	8454.000
GR	1095.000	8463.000	1095.000	8495.000	1098.000	8510.000	1098.000	8560.000	1098.000	8595.000
GR	1098.000	8649.000	1098.000	8697.000	1096.000	8733.000	1093.000	8751.000	1094.000	8786.000
GR	1094.000	8832.000	1094.000	8884.000	1093.000	8929.000	1092.000	8976.000	1092.000	9000.000
GR	1094.000	9084.000	1095.000	9132.000	1096.000	9181.000	1096.000	9248.000	1096.000	9306.000
GR	1096.000	9372.000	1096.000	9430.000	1096.000	9492.000	1097.000	9548.000	1096.000	9587.000
GR	1095.000	9621.000	1095.000	9671.000	1094.000	9713.000	1093.000	9777.000	1091.000	9824.000
GR	1091.000	9864.000	1091.000	9920.000	1089.000	9954.000	1089.000	10000.000	1088.000	10057.000
GR	1089.000	10111.000	1089.000	10183.000	1089.000	10258.000	1089.000	10308.000	1091.000	10363.000
GR	1092.000	10430.000	1093.000	10491.000	1094.000	10545.000	1094.000	10622.000	1094.000	10693.000
GR	1094.000	10770.000	1094.000	10844.000	1094.000	10915.000	1094.000	10979.000	1094.000	11042.000
GR	1096.000	11102.000	1096.000	11150.000	1097.000	11207.000	1097.000	11272.000	1097.000	11348.000
GR	1098.000	11423.000	1098.000	11500.000	1098.000	11579.000	1099.000	11662.000	1099.000	11737.000
GR	1099.000	11811.000	1099.000	11875.000	1099.000	11949.000	1099.000	12023.000	1099.000	12111.000
GR	1099.000	12190.000	1101.000	12260.000	1100.000	12329.000	1101.000	12401.000	1101.000	12465.000
GR	1103.000	12520.000	1103.000	12552.000	1103.000	12625.000	1103.000	12729.000	1103.000	12843.000

ET	.000	7.100	9.100	.000	.000	.000	.000	12800.000	9005.000	11800.000
X1	14.879	85.000	9006.000	10475.000	950.000	950.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1105.000	8665.000	1117.000	8707.000	1132.000	8752.000	1131.000	8812.000	1130.000	8870.000
GR	1131.000	8901.000	1131.000	8928.000	1127.000	8959.000	1118.000	9006.000	1098.000	9056.000
GR	1098.000	9103.000	1097.000	9159.000	1097.000	9209.000	1098.000	9260.000	1099.000	9302.000
GR	1098.000	9353.000	1097.000	9402.000	1095.000	9456.000	1094.000	9510.000	1093.000	9565.000
GR	1092.000	9622.000	1091.000	9656.000	1095.000	9677.000	1095.000	9728.000	1095.000	9783.000

GR	1097.000	9823.000	1092.000	9875.000	1092.000	9905.000	1091.000	9942.000	1089.000	10000.000
GR	1089.000	10031.000	1090.000	10051.000	1091.000	10092.000	1091.000	10131.000	1091.000	10177.000
GR	1092.000	10218.000	1090.000	10255.000	1090.000	10300.000	1089.000	10331.000	1094.000	10346.000
GR	1097.000	10362.000	1097.000	10419.000	1098.000	10475.000	1097.000	10556.000	1096.000	10641.000
GR	1096.000	10723.000	1097.000	10785.000	1097.000	10857.000	1097.000	10930.000	1097.000	10998.000
GR	1097.000	11071.000	1097.000	11140.000	1097.000	11201.000	1097.000	11268.000	1097.000	11323.000
GR	1097.000	11386.000	1097.000	11424.000	1094.000	11441.000	1094.000	11495.000	1094.000	11539.000
GR	1094.000	11565.000	1097.000	11581.000	1097.000	11611.000	1096.000	11662.000	1097.000	11715.000
GR	1097.000	11780.000	1097.000	11849.000	1097.000	11931.000	1097.000	12017.000	1097.000	12101.000
GR	1097.000	12181.000	1098.000	12252.000	1099.000	12334.000	1099.000	12422.000	1099.000	12512.000
GR	1100.000	12623.000	1101.000	12720.000	1102.000	12816.000	1102.000	12911.000	1102.000	13011.000
GR	1102.000	13106.000	1101.000	13195.000	1102.000	13259.000	1100.000	13295.000	1099.000	13348.000
QT	2.000	104000.000	104000.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	9026.000	11550.000
X1	15.069	95.000	9026.000	10802.000	1000.000	1000.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1128.000	8922.000	1130.000	8951.000	1129.000	9002.000	1127.000	9026.000	1105.000	9065.000
GR	1101.000	9091.000	1098.000	9131.000	1099.000	9159.000	1100.000	9202.000	1096.000	9234.000
GR	1092.000	9248.000	1091.000	9294.000	1092.000	9344.000	1093.000	9404.000	1096.000	9438.000
GR	1096.000	9500.000	1095.000	9552.000	1094.000	9610.000	1094.000	9664.000	1094.000	9719.000
GR	1093.000	9785.000	1090.000	9799.000	1089.000	9838.000	1088.000	9886.000	1089.000	9923.000
GR	1096.000	9950.000	1096.000	10000.000	1096.000	10059.000	1096.000	10111.000	1095.000	10173.000
GR	1095.000	10235.000	1096.000	10295.000	1094.000	10357.000	1094.000	10403.000	1095.000	10433.000
GR	1095.000	10499.000	1095.000	10548.000	1097.000	10579.000	1096.000	10636.000	1094.000	10653.000
GR	1092.000	10688.000	1098.000	10701.000	1095.000	10743.000	1095.000	10786.000	1099.000	10802.000
GR	1099.000	10858.000	1099.000	10915.000	1100.000	10965.000	1098.000	11014.000	1099.000	11073.000
GR	1099.000	11119.000	1098.000	11152.000	1097.000	11204.000	1097.000	11261.000	1096.000	11318.000
GR	1095.000	11372.000	1096.000	11410.000	1097.000	11451.000	1097.000	11505.000	1098.000	11572.000
GR	1098.000	11633.000	1099.000	11687.000	1100.000	11743.000	1100.000	11810.000	1100.000	11866.000
GR	1100.000	11910.000	1101.000	11958.000	1101.000	12008.000	1101.000	12064.000	1101.000	12124.000
GR	1100.000	12208.000	1100.000	12271.000	1100.000	12328.000	1100.000	12400.000	1100.000	12467.000
GR	1100.000	12574.000	1100.000	12652.000	1101.000	12732.000	1101.000	12822.000	1101.000	12904.000
GR	1102.000	12986.000	1102.000	13060.000	1103.000	13137.000	1103.000	13210.000	1104.000	13269.000
GR	1104.000	13350.000	1105.000	13424.000	1106.000	13507.000	1106.000	13593.000	1106.000	13666.000
GR	1106.000	13739.000	1106.000	13809.000	1107.000	13882.000	1107.000	13966.000	1107.000	14047.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	9360.000	11500.000
X1	15.258	85.000	9361.000	11188.000	1050.000	750.000	1000.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1132.000	9201.000	1133.000	9251.000	1132.000	9302.000	1131.000	9361.000	1112.000	9396.000
GR	1097.000	9423.000	1095.000	9451.000	1094.000	9502.000	1094.000	9562.000	1094.000	9621.000
GR	1094.000	9691.000	1098.000	9711.000	1098.000	9770.000	1099.000	9826.000	1099.000	9889.000
GR	1098.000	9942.000	1098.000	9986.000	1098.000	10000.000	1099.000	10059.000	1099.000	10111.000
GR	1098.000	10170.000	1098.000	10228.000	1097.000	10240.000	1100.000	10266.000	1101.000	10317.000
GR	1101.000	10372.000	1102.000	10425.000	1102.000	10482.000	1102.000	10539.000	1102.000	10592.000
GR	1101.000	10624.000	1098.000	10654.000	1099.000	10701.000	1098.000	10760.000	1099.000	10809.000
GR	1099.000	10854.000	1101.000	10878.000	1098.000	10911.000	1098.000	10940.000	1097.000	10990.000
GR	1096.000	11010.000	1099.000	11031.000	1099.000	11080.000	1098.000	11119.000	1098.000	11131.000
GR	1102.000	11153.000	1103.000	11188.000	1103.000	11230.000	1103.000	11285.000	1103.000	11341.000
GR	1103.000	11399.000	1104.000	11461.000	1104.000	11525.000	1104.000	11593.000	1104.000	11664.000
GR	1104.000	11733.000	1104.000	11792.000	1104.000	11855.000	1104.000	11931.000	1104.000	11992.000
GR	1104.000	12162.000	1104.000	12244.000	1104.000	12276.000	1104.000	12352.000	1104.000	12430.000
GR	1104.000	12508.000	1104.000	12594.000	1104.000	12680.000	1107.000	12774.000	1107.000	12852.000

GR	1107.000	12942.000	1107.000	13031.000	1107.000	13119.000	1107.000	13213.000	1107.000	13300.000
GR	1108.000	13370.000	1108.000	13441.000	1112.000	13484.000	1112.000	13559.000	1111.000	13616.000
GR	1111.000	13718.000	1111.000	13807.000	1110.000	13901.000	1110.000	13988.000	1110.000	14071.000
QT	2.000	105600.000	105600.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	9349.000	11492.000
X1	15.454	85.000	9350.000	11491.000	1060.000	840.000	1035.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1127.000	9230.000	1126.000	9276.000	1129.000	9293.000	1129.000	9325.000	1127.000	9350.000
GR	1097.000	9392.000	1098.000	9440.000	1098.000	9492.000	1098.000	9552.000	1095.000	9598.000
GR	1096.000	9642.000	1093.000	9681.000	1094.000	9705.000	1095.000	9733.000	1099.000	9771.000
GR	1102.000	9812.000	1103.000	9861.000	1103.000	9909.000	1102.000	9956.000	1102.000	10000.000
GR	1102.000	10066.000	1101.000	10116.000	1100.000	10167.000	1101.000	10219.000	1102.000	10280.000
GR	1102.000	10324.000	1104.000	10361.000	1104.000	10418.000	1104.000	10483.000	1106.000	10544.000
GR	1106.000	10607.000	1106.000	10673.000	1106.000	10740.000	1105.000	10817.000	1105.000	10885.000
GR	1105.000	10950.000	1101.000	10968.000	1101.000	11023.000	1101.000	11073.000	1103.000	11099.000
GR	1103.000	11132.000	1103.000	11159.000	1103.000	11191.000	1102.000	11221.000	1101.000	11282.000
GR	1101.000	11348.000	1102.000	11390.000	1105.000	11441.000	1106.000	11491.000	1106.000	11541.000
GR	1106.000	11601.000	1106.000	11665.000	1106.000	11724.000	1106.000	11790.000	1106.000	11844.000
GR	1106.000	11906.000	1107.000	11954.000	1108.000	11998.000	1107.000	12058.000	1107.000	12104.000
GR	1107.000	12173.000	1108.000	12243.000	1108.000	12323.000	1108.000	12401.000	1108.000	12470.000
GR	1108.000	12532.000	1108.000	12571.000	1109.000	12671.000	1109.000	12747.000	1109.000	12829.000
GR	1110.000	12912.000	1110.000	12978.000	1110.000	13052.000	1110.000	13143.000	1110.000	13225.000
GR	1111.000	13313.000	1111.000	13383.000	1110.000	13451.000	1111.000	13528.000	1113.000	13611.000
GR	1113.000	13701.000	1111.000	13784.000	1111.000	13861.000	1110.000	13942.000	1110.000	13983.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	9311.000	11600.000
X1	15.647	95.000	9312.000	11506.000	1060.000	810.000	1020.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1133.000	8960.000	1132.000	9020.000	1129.000	9053.000	1116.000	9102.000	1112.000	9132.000
GR	1111.000	9180.000	1117.000	9218.000	1121.000	9247.000	1132.000	9282.000	1132.000	9312.000
GR	1105.000	9351.000	1097.000	9377.000	1097.000	9442.000	1097.000	9507.000	1097.000	9552.000
GR	1100.000	9589.000	1102.000	9625.000	1106.000	9645.000	1106.000	9697.000	1103.000	9744.000
GR	1104.000	9760.000	1108.000	9783.000	1108.000	9832.000	1108.000	9886.000	1108.000	9941.000
GR	1107.000	10000.000	1107.000	10026.000	1103.000	10033.000	1103.000	10080.000	1103.000	10134.000
GR	1105.000	10152.000	1105.000	10213.000	1104.000	10262.000	1103.000	10293.000	1103.000	10387.000
GR	1106.000	10402.000	1107.000	10463.000	1107.000	10531.000	1109.000	10588.000	1109.000	10650.000
GR	1109.000	10717.000	1108.000	10775.000	1108.000	10857.000	1110.000	10925.000	1108.000	10993.000
GR	1108.000	11065.000	1108.000	11134.000	1108.000	11178.000	1104.000	11194.000	1104.000	11251.000
GR	1104.000	11297.000	1103.000	11348.000	1103.000	11402.000	1102.000	11441.000	1106.000	11460.000
GR	1107.000	11506.000	1107.000	11566.000	1107.000	11644.000	1107.000	11712.000	1107.000	11791.000
GR	1107.000	11868.000	1107.000	11941.000	1107.000	12010.000	1107.000	12080.000	1107.000	12151.000
GR	1107.000	12223.000	1107.000	12302.000	1107.000	12391.000	1108.000	12469.000	1108.000	12532.000
GR	1108.000	12610.000	1108.000	12703.000	1108.000	12785.000	1109.000	12845.000	1109.000	12930.000
GR	1109.000	13028.000	1109.000	13119.000	1109.000	13215.000	1109.000	13335.000	1110.000	13438.000
GR	1110.000	13541.000	1111.000	13647.000	1111.000	13742.000	1111.000	13867.000	1111.000	13948.000
GR	1111.000	14028.000	1112.000	14120.000	1112.000	14234.000	1112.000	14251.000	1112.000	14356.000
GR	1112.000	14475.000	1112.000	14574.000	1112.000	14676.000	1113.000	14748.000	1114.000	14843.000
EJ	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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


*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .300 CEHV=    .500
1490 NH CARD USED
*SECNO 12.357

3265 DIVIDED FLOW


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1057.40 ELREA=     1066.00

    12.36    12.99  1064.79  1061.27  1064.79  1065.06      .27      .00      .00  1057.40
   95800.   72834.   22966.       0.   19797.    4141.       0.       0.       0.   1066.00
      .00     3.68     5.55      .00     .036     .030     .050     .000  1051.80  4213.31
  .000725     600.     600.     600.        0       17        0      .00  5550.33 10089.00


FLOW DISTRIBUTION FOR SECNO=     12.36          CWSEL=   1064.79

STA=    4213.    4579.    4816.    5243.    5672.    6755.    7354.    7473.    7638.    7707.    7964.    8128.    8996.
  PER Q=      3.8      3.0      4.7      3.0      3.0      5.2      3.5      3.1      5.2      4.0      3.3      3.0
   AREA=   1443.5   1064.1   1749.2   1349.8   1758.1   1502.2    879.4    869.6    896.3   1239.8    959.6   1172.4
    VEL=      2.5      2.7      2.6      2.2      1.6      3.3      3.8      3.4      5.5      3.1      3.3      2.5
STA=    8996.    9187.    9287.    9334.    9476.    9605.   10092.
  PER Q=      4.5      8.7      4.3      8.3      5.4     24.0
   AREA=    803.0   1194.0    580.0   1337.9    998.5   4140.8
    VEL=      5.3      7.0      7.1      6.0      5.2      5.5

CCHV=    .100 CEHV=    .300
1490 NH CARD USED
*SECNO 12.470

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    12.47     9.39  1064.59  1064.59      .00  1066.58     1.98      .90      .51  1065.00
   96150.   19902.   76248.       0.    4102.    6124.       0.     235.      60.   1067.90
      .02     4.85    12.45      .00     .040     .030     .035     .000  1055.20  4592.71
  .004642     600.     600.     600.        0       19        0      .00  3125.09 10200.76
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     12.47          CWSEL=   1064.59

STA=    4593.    5261.    7643.    8231.    8351.    8453.    8537.   10205.
  PER Q=      3.9      5.0      3.4      4.0      3.4       .9     79.3
   AREA=   1065.3   1091.7    724.2    551.1    468.5    200.9   6123.6
    VEL=      3.6      4.4      4.5      7.0      7.0      4.5     12.5

1490 NH CARD USED
*SECNO 12.584

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    12.58    12.73  1067.33  1066.33      .00  1068.67     1.34     2.02      .06  1066.20
   96750.   18843.   77907.       0.    5355.    7639.       0.     395.     105.   1068.30
      .03     3.52    10.20      .00     .043     .030     .035     .000  1054.60  4935.21
  .002567     600.     600.     600.        2       11        0      .00  3454.43 10376.47


FLOW DISTRIBUTION FOR SECNO=     12.58          CWSEL=   1067.33

STA=    4935.    5345.    6079.    8171.    8491.    8659.    9450.   10416.
  PER Q=      3.2      3.1      3.2      4.6      4.0      1.4     80.5
   AREA=    948.6   1156.8    966.8   1066.1    806.9    409.6   7639.4
    VEL=      3.3      2.6      3.2      4.2      4.8      3.2     10.2

1490 NH CARD USED
*SECNO 12.698

3265 DIVIDED FLOW

    12.70    11.08  1068.88  1068.04      .00  1070.53     1.65     1.77      .09  1068.40
   96850.   11927.   84923.       0.    3337.    7778.       0.     561.     152.   1074.20
      .05     3.57    10.92      .00     .045     .030     .035     .000  1057.80  5146.80
  .003408     600.     600.     600.        3       12        0      .00  3367.85 10523.96


FLOW DISTRIBUTION FOR SECNO=     12.70          CWSEL=   1068.88

STA=    5147.    8343.    8572.    8780.    9467.   10539.
  PER Q=      3.1      4.4      3.2      1.7     87.7
   AREA=   1150.8    890.2    700.0    596.4   7777.6
    VEL=      2.6      4.8      4.4      2.7     10.9
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 12.811

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    12.81    11.35  1071.75  1071.75      .00  1073.42     1.67     1.94      .01  1071.20
   97200.   21096.   76104.       0.    6366.    6574.       0.     727.     208.   1080.60
      .07     3.31    11.58      .00     .044     .030     .035     .000  1060.40  5348.72
  .003060     600.     600.     600.        0        5        0      .00  4706.35 10305.76


FLOW DISTRIBUTION FOR SECNO=     12.81          CWSEL=   1071.75

STA=    5349.    6376.    8489.    8781.    8928.    9263.    9551.   10351.
  PER Q=      3.8      3.8      5.5      3.6      4.0      1.1     78.3
   AREA=   1421.6   1684.8   1141.4    691.4   1001.2    425.8   6573.7
    VEL=      2.6      2.2      4.7      5.1      3.8      2.5     11.6

*SECNO 13.004
3280 CROSS SECTION     13.00 EXTENDED      1.91 FEET


3301 HV CHANGED MORE THAN HVINS


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1070.00 ELREA=     1081.00

    13.00    14.91  1074.91  1072.62      .00  1075.34      .42     1.79      .12  1070.00
   97200.   54436.   42764.       0.   15649.    6261.       0.    1135.     310.   1081.00
      .12     3.48     6.83      .00     .040     .040     .040     .000  1060.00  6227.40
  .001137    1020.    1020.    1020.        2        8        0      .00  4046.38 10273.77


FLOW DISTRIBUTION FOR SECNO=     13.00          CWSEL=   1074.91

STA=    6227.    6689.    7030.    7393.    7698.    7879.    8100.    8299.    8471.    8660.    8860.    9084.    9300.
  PER Q=      4.3      4.3      3.6      4.0      3.3      4.0      3.0      3.7      3.0      3.0      4.0      3.2
   AREA=   1431.4   1333.7   1220.7   1231.9    888.9   1085.4    870.3    927.7    858.7    878.2   1070.6    930.8
    VEL=      2.9      3.1      2.9      3.2      3.6      3.6      3.4      3.9      3.5      3.4      3.6      3.4
STA=    9300.    9443.    9568.    9744.    9793.   10299.
  PER Q=      4.4      3.8      3.4       .9     44.0
   AREA=    953.8    831.4    894.9    240.6   6261.3
    VEL=      4.4      4.4      3.7      3.6      6.8
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 13.175

3265 DIVIDED FLOW


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1071.00 ELREA=     1083.00

    13.18    14.08  1076.08  1074.59      .00  1076.76      .68     1.35      .08  1071.00
   97200.   45542.   51658.       0.   11194.    6258.       0.    1542.     391.   1083.00
      .16     4.07     8.25      .00     .040     .040     .040     .000  1062.00  6452.29
  .002052     900.     900.     900.        2        9        0      .00  3801.77 10298.79


FLOW DISTRIBUTION FOR SECNO=     13.18          CWSEL=   1076.08

STA=    6452.    6991.    7267.    7592.    7900.    8133.    8288.    8495.    8775.    9027.    9219.    9318.    9470.
  PER Q=      3.7      3.1      3.7      3.5      3.1      3.1      3.2      3.8      3.2      3.3      4.0      3.7
   AREA=   1135.7    850.7   1001.8    949.4    780.7    673.8    764.1    934.6    823.3    724.8    654.2    743.0
    VEL=      3.2      3.6      3.6      3.6      3.8      4.5      4.0      3.9      3.8      4.4      5.9      4.9
STA=    9470.    9639.    9726.   10311.
  PER Q=      3.2      2.3     53.1
   AREA=    715.4    442.2   6258.4
    VEL=      4.4      5.0      8.3

*SECNO 13.364

3265 DIVIDED FLOW


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1074.00 ELREA=     1088.00

    13.36    13.19  1078.19  1075.92      .00  1078.84      .65     2.08      .00  1074.00
   99000.   27766.   71234.       0.    7125.    9866.       0.    1937.     475.   1088.00
      .21     3.90     7.22      .00     .040     .040     .040     .000  1065.00  6979.15
  .002103    1000.    1000.    1000.        3       15        0      .00  3487.63 10501.76


FLOW DISTRIBUTION FOR SECNO=     13.36          CWSEL=   1078.19

STA=    6979.    7359.    7841.    8187.    8498.    8982.    9119.    9224.    9342.    9373.   10524.
  PER Q=      3.3      3.1      3.0      3.4      3.8      3.4      3.8      3.7       .6     72.0
   AREA=    973.5   1055.7    905.8    936.1   1126.2    678.6    650.0    669.4    129.9   9866.5
    VEL=      3.3      2.9      3.3      3.6      3.4      5.0      5.7      5.4      4.4      7.2
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 13.554

3265 DIVIDED FLOW


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1077.00 ELREA=   100000.00

    13.55    13.05  1080.05  1077.00      .00  1080.52      .47     1.67      .02  1077.00
   99000.   15337.   83663.       0.    3600.   14697.       0.    2342.     546. 100000.00
      .26     4.26     5.69      .00     .040     .040     .040     .000  1067.00  7016.67
  .001351    1000.    1000.    1000.        2       22        0      .00  2704.55 10519.00


FLOW DISTRIBUTION FOR SECNO=     13.55          CWSEL=   1080.05

STA=    7017.    8236.    8361.    8597.    8805.   10540.
  PER Q=      5.4      3.8      3.7      2.5     84.5
   AREA=   1043.2    795.1    993.5    768.5  14697.1
    VEL=      5.1      4.8      3.7      3.3      5.7

*SECNO 13.743

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1081.00 ELREA=     1086.00

    13.74     8.97  1081.97  1081.85      .00  1083.82     1.86     2.88      .42  1081.00
  100000.    7820.   92180.       0.    1425.    8174.       0.    2662.     606.   1086.00
      .29     5.49    11.28      .00     .040     .040     .040     .000  1073.00  7344.10
  .009769    1000.    1000.    1000.        2       16        0      .00  2520.50 10725.11


FLOW DISTRIBUTION FOR SECNO=     13.74          CWSEL=   1081.97

STA=    7344.    8028.    9016.    9209.   10739.
  PER Q=      3.1      3.7      1.1     92.2
   AREA=    487.0    717.8    220.1   8174.2
    VEL=      6.3      5.1      5.0     11.3
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 13.932

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    13.93    11.98  1086.98  1084.21      .00  1087.52      .53     3.56      .13  1083.00
  100000.   30129.   68873.     998.    7738.   10477.     415.    2986.     683.   1085.00
      .33     3.89     6.57     2.41     .040     .040     .040     .000  1075.00  6533.24
  .001827    1000.    1000.    1000.        2        8        0      .00  4165.78 10849.09


FLOW DISTRIBUTION FOR SECNO=     13.93          CWSEL=   1086.98

STA=    6533.    7023.    7976.    8379.    8587.    8749.    8919.    9260.    9377.   10619.   10849.
  PER Q=      3.0      3.1      3.2      8.3      3.3      4.0      3.5      1.6     68.9      1.0
   AREA=   1016.2   1271.9    937.6   1442.2    749.9    846.3   1043.6    430.6  10476.8    415.0
    VEL=      3.0      2.4      3.4      5.8      4.4      4.8      3.4      3.8      6.6      2.4

*SECNO 14.122

3265 DIVIDED FLOW


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1080.00 ELREA=     1091.00

    14.12     9.18  1089.18  1087.59      .00  1089.76      .58     2.23      .01  1080.00
  101000.   48060.   52940.       0.    9611.    7638.       0.    3378.     773.   1091.00
      .38     5.00     6.93      .00     .040     .040     .040     .000  1080.00  6253.14
  .003036     900.    1000.    1050.        4       14        0      .00  4232.39 10709.81


FLOW DISTRIBUTION FOR SECNO=     14.12          CWSEL=   1089.18

STA=    6253.    6527.    6743.    6873.    6946.    7011.    7061.    7340.    7736.    7927.    8088.    8603.    8893.
  PER Q=      3.3      3.8      4.4      3.5      3.9      3.4      3.2      4.1      4.2      3.4      3.1      3.6
   AREA=    784.0    776.4    708.0    488.0    499.5    409.2    776.5   1014.7    799.3    653.3    970.2    856.6
    VEL=      4.3      4.9      6.3      7.3      8.0      8.3      4.2      4.1      5.3      5.2      3.2      4.3
STA=    8893.    9247.    9486.   10715.
  PER Q=      3.0       .6     52.4
   AREA=    767.6    107.4   7638.0
    VEL=      4.0      5.4      6.9
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 14.311
    14.31    11.08  1092.08  1090.82      .00  1092.68      .60     2.91      .01  1090.00
  102500.   31352.   57997.   13151.    7369.    8033.    2529.    3749.     865.   1090.00
      .42     4.25     7.22     5.20     .040     .040     .040     .000  1081.00  6469.66
  .003203     800.    1000.    1200.        2        8        0      .00  4867.11 11336.77


FLOW DISTRIBUTION FOR SECNO=     14.31          CWSEL=   1092.08

STA=    6470.    6830.    7125.    7367.    7654.    8201.    8491.    8919.    9345.    9387.   10648.   10945.   11067.
  PER Q=      3.8      3.4      3.5      3.4      3.0      4.4      5.0      3.7       .4     56.6      3.4      3.3
   AREA=    934.3    795.6    764.2    807.0    981.2    884.7   1167.2    926.1    108.5   8033.3    828.8    567.2
    VEL=      4.2      4.4      4.7      4.3      3.2      5.1      4.4      4.1      4.0      7.2      4.2      5.9
STA=   11067.   11179.   11337.
  PER Q=      3.2      3.0
   AREA=    545.4    587.5
    VEL=      6.0      5.2

*SECNO 14.501
    14.50    11.41  1095.41  1095.03      .00  1096.17      .76     3.44      .05  1095.00
  102500.   24108.   57685.   20707.    5283.    7321.    3096.    4133.     965.   1090.00
      .46     4.56     7.88     6.69     .040     .040     .040     .000  1084.00  7336.55
  .003663     900.    1000.    1200.        1        8        0      .00  4050.29 11386.84


FLOW DISTRIBUTION FOR SECNO=     14.50          CWSEL=   1095.41

STA=    7337.    7626.    7871.    8450.    8653.    8778.    9144.    9423.    9470.   10585.   10680.   10756.   10824.
  PER Q=      3.4      3.1      3.7      4.0      3.1      3.0      3.1       .1     56.3      4.4      3.7      3.3
   AREA=    782.3    672.8   1066.5    730.8    518.4    771.1    698.5     42.5   7320.6    595.3    486.6    435.4
    VEL=      4.4      4.7      3.6      5.6      6.2      4.0      4.6      2.1      7.9      7.6      7.8      7.8
STA=   10824.   10893.   11034.   11387.
  PER Q=      3.3      3.6      1.8
   AREA=    441.8    590.9    546.2
    VEL=      7.8      6.3      3.4

*SECNO 14.690
    14.69    10.83  1098.83  1097.33      .00  1099.64      .80     3.45      .01  1097.00
  102500.   22903.   61281.   18316.    4302.    7477.    3414.    4484.    1050.   1094.00
      .50     5.32     8.20     5.37     .040     .040     .040     .000  1088.00  8198.19
  .003317     960.    1000.    1000.        1       14        0      .00  3449.63 11647.82
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     14.69         CWSEL=   1098.83

STA=    8198.    8495.    8832.    8929.    9000.    9084.    9306.    9548.   10545.   10693.   10844.   10979.   11150.
  PER Q=      3.0      3.6      3.0      3.4      3.3      3.4      2.7     59.8      4.3      4.3      3.9      3.6
   AREA=    736.8    742.4    490.9    461.4    489.6    724.6    656.6   7476.6    714.7    729.2    651.9    669.8
    VEL=      4.2      4.9      6.3      7.5      6.9      4.8      4.2      8.2      6.1      6.1      6.1      5.4
STA=   11150.   11648.
  PER Q=      1.8
   AREA=    648.2
    VEL=      2.9

*SECNO 14.879

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1118.00 ELREA=     1098.00

    14.88    12.53  1101.53  1099.00      .00  1101.96      .43     2.29      .04  1118.00
  102500.       0.   61091.   41409.       0.   10468.    9612.    4879.    1129.   1098.00
      .55      .00     5.84     4.31     .040     .040     .040     .000  1089.00  9047.19
  .001737     950.    1000.     950.        2       10        0      .00  3672.81 12720.00


FLOW DISTRIBUTION FOR SECNO=     14.88         CWSEL=   1101.53

STA=    9047.   10475.   10641.   10785.   10998.   11201.   11386.   11495.   11565.   11715.   11931.   12101.   12334.
  PER Q=     59.6      3.1      3.5      4.0      3.8      3.5      3.6      3.1      3.4      4.0      3.2      3.4
   AREA=  10467.9    752.9    764.3    963.4    918.2    836.8    680.5    526.6    754.5    977.0    768.9    895.4
    VEL=      5.8      4.3      4.7      4.2      4.2      4.2      5.4      5.9      4.6      4.2      4.2      3.9
STA=   12334.   12720.
  PER Q=      2.0
   AREA=    773.0
    VEL=      2.6

*SECNO 15.069

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1127.00 ELREA=     1099.00

    15.07    15.04  1103.04  1099.54      .00  1103.41      .37     1.44      .01  1127.00
  104000.       0.   76729.   27271.       0.   14429.    8155.    5368.    1218.   1099.00
      .61      .00     5.32     3.34     .040     .040     .040     .000  1088.00  9077.82
  .001210    1000.    1000.    1000.        2       10        0      .00  4133.85 13211.67
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     15.07          CWSEL=   1103.04

STA=    9078.   10802.   11073.   11261.   11372.   11505.   11687.   12208.   12652.   13212.
  PER Q=     73.8      3.5      3.6      3.6      3.9      3.4      3.3      3.5      1.5
   AREA=  14429.3   1096.2    965.8    778.6    879.3    921.7   1373.8   1344.6    795.3
    VEL=      5.3      3.3      3.9      4.7      4.6      3.8      2.5      2.7      2.0

*SECNO 15.258

3301 HV CHANGED MORE THAN HVINS


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1131.00 ELREA=     1103.00

    15.26    10.56  1104.56  1103.19      .00  1105.92     1.35     2.21      .29  1131.00
  104000.       0.  101183.    2817.       0.   10704.    1088.    5736.    1292.   1103.00
      .64      .00     9.45     2.59     .040     .040     .040     .000  1094.00  9409.38
  .005930    1050.    1000.     750.        2       14        0      .00  3288.28 12697.67


FLOW DISTRIBUTION FOR SECNO=     15.26          CWSEL=   1104.56

STA=    9409.   11188.   12698.
  PER Q=     97.3      2.7
   AREA=  10704.2   1088.2
    VEL=      9.5      2.6

*SECNO 15.454

3301 HV CHANGED MORE THAN HVINS


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1127.00 ELREA=     1106.00

    15.45    15.96  1108.96  1106.20      .00  1109.61      .65     3.62      .07  1127.00
  105600.       0.   98785.    6815.       0.   14929.    2195.    6073.    1364.   1106.00
      .68      .00     6.62     3.10     .040     .040     .040     .000  1093.00  9375.25
  .002352    1060.    1035.     840.        2       11        0      .00  3292.48 12667.73


FLOW DISTRIBUTION FOR SECNO=     15.45          CWSEL=   1108.96

STA=    9375.   11491.   11790.   12401.   12668.
  PER Q=     93.5      3.1      3.0       .3
   AREA=  14929.1    887.2   1097.0    211.2
    VEL=      6.6      3.7      2.9      1.6
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 15.647

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 1132.00 ELREA= 1107.00

15.65	14.39	1111.39	1109.20	.00	1111.83	.44	2.21	.02	1132.00
105600.	0.	76957.	28643.	0.	13353.	7195.	6491.	1449.	1107.00
.74	.00	5.76	3.98	.040	.040	.040	.000	1097.00	9341.77
.002135	1060.	1020.	810.	3	13	0	.00	4722.23	14063.99

FLOW DISTRIBUTION FOR SECNO= 15.65 CWSEL= 1111.39

STA=	9342.	11506.	11712.	11941.	12151.	12391.	12703.	13119.	14064.
PER Q=	72.9	3.9	4.4	4.0	4.6	4.1	3.5	2.6
AREA=	13353.1	904.6	1005.6	922.2	1053.9	1097.1	1106.8	1105.2
VEL=	5.8	4.6	4.6	4.6	4.6	4.0	3.3	2.4

THIS RUN EXECUTED 09-08-87

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  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
  IBM-PC-XT VERSION AUGUST 1985
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T1 REVISED FLOODPLAIN/FLOODWAY STUDY WITH NEW WADDELL DAM IN PLACE
T2 NORTHERN AVENUE TO CACTUS ROAD USING 1984 COE HEC-2 MODEL
T3 AGUA FRIA RIVER CALIBRATION RUN TO RECONSTRUCT COE MODEL

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	.000000	.00	.0	0.	1064.910	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	.000	-1.000	.000	.000	.000	.000	.000	.000	15.000

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


*PROF 2

CCHV=    .300 CEHV=    .500
1490 NH CARD USED
*SECNO 12.357

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    7160.0   10093.0  TYPE=     1  TARGET=    2933.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1057.40 ELREA=     1066.00

    12.36    13.11  1064.91      .00  1064.79  1065.43      .52      .00      .00  1057.40
   95800.   67939.   27861.       0.   12531.    4199.       0.       0.       0.   1066.00
      .00     5.42     6.64      .00     .035     .030     .000     .000  1051.80  7160.00
  .001020     600.     600.     600.        0        0        0      .00  2803.44 10089.30


FLOW DISTRIBUTION FOR SECNO=     12.36          CWSEL=   1064.91

STA=    7160.    7354.    7473.    7638.    7707.    7893.    8039.    8207.    9152.    9287.    9334.    9476.    9605.
  PER Q=      6.2      4.2      3.7      6.2      3.1      4.3      3.3      4.8     13.1      5.2     10.1      6.6
   AREA=   1349.5    893.7    889.4    904.6    837.6    975.3    882.4   1289.5   1554.6    585.6   1354.9   1013.9
    VEL=      4.4      4.6      4.0      6.6      3.5      4.2      3.6      3.6      8.1      8.5      7.1      6.3
STA=    9605.   10092.
  PER Q=     29.1
   AREA=   4198.9
    VEL=      6.6

CCHV=    .100 CEHV=    .300
1490 NH CARD USED
*SECNO 12.470

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    7440.0   10206.0  TYPE=     1  TARGET=    2766.000
    12.47     9.78  1064.98      .00  1064.59  1066.97     1.99     1.10      .44  1065.00
   96150.   17300.   78850.       0.    2970.    6456.       0.     180.      32.   1067.90
      .02     5.82    12.21      .00     .040     .030     .000     .000  1055.20  7448.60
  .004184     600.     600.     600.        3        0        0      .00  1778.61 10201.25
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     12.47          CWSEL=   1064.98

STA=    7449.    7643.    8231.    8351.    8453.    8543.   10205.
  PER Q=      4.7      4.1      4.4      3.7      1.1     82.0
   AREA=    751.3    879.2    597.5    507.9    234.5   6455.7
    VEL=      6.0      4.5      7.0      7.0      4.5     12.2

1490 NH CARD USED
*SECNO 12.584

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    7810.0   10417.0  TYPE=     1  TARGET=    2607.000
    12.58    12.87  1067.47      .00  1067.33  1069.03     1.57     2.02      .04  1066.20
   96750.   13673.   83077.       0.    3192.    7768.       0.     321.      58.   1068.30
      .03     4.28    10.69      .00     .045     .030     .000     .000  1054.60  7900.40
  .002762     600.     600.     600.        3        0        0      .00  2024.89 10376.69


FLOW DISTRIBUTION FOR SECNO=     12.58          CWSEL=   1067.47

STA=    7900.    8171.    8424.    8620.    9450.   10416.
  PER Q=      3.1      3.1      5.1      2.8     85.9
   AREA=    797.0    747.6    978.1    669.2   7768.4
    VEL=      3.8      4.0      5.1      4.0     10.7

1490 NH CARD USED
*SECNO 12.698

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    8100.0   10540.0  TYPE=     1  TARGET=    2440.000
    12.70    11.41  1069.21      .00  1068.88  1070.76     1.55     1.72      .00  1068.40
   96850.   11224.   85626.       0.    2940.    8135.       0.     472.      88.   1074.20
      .05     3.82    10.53      .00     .045     .030     .000     .000  1057.80  8100.00
  .002987     600.     600.     600.        2        0        0      .00  2359.69 10524.91


FLOW DISTRIBUTION FOR SECNO=     12.70          CWSEL=   1069.21

STA=    8100.    8448.    8637.    8835.    9467.   10539.
  PER Q=      3.5      3.5      3.2      1.4     88.4
   AREA=    836.7    748.7    716.2    637.9   8134.9
    VEL=      4.0      4.5      4.3      2.2     10.5
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 12.811

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    8000.0   10351.0  TYPE=     1  TARGET=    2351.000
    12.81    10.70  1071.10  1071.10  1071.75  1073.71     2.61     2.24      .32  1071.20
   97200.   13203.   83997.       0.    2792.    6079.       0.     610.     117. 100000.00
      .06     4.73    13.82      .00     .045     .030     .000     .000  1060.40  8384.31
  .004817     600.     600.     600.        3       11        0      .00  1905.94 10304.13


FLOW DISTRIBUTION FOR SECNO=     12.81          CWSEL=   1071.10

STA=    8384.    8781.    8928.    9263.    9538.   10351.
  PER Q=      6.1      3.6      3.3       .6     86.4
   AREA=   1177.2    595.0    781.6    237.7   6079.5
    VEL=      5.1      5.8      4.1      2.3     13.8

*SECNO 13.004
3280 CROSS SECTION     13.00 EXTENDED      2.65 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    8000.0   10300.0  TYPE=     1  TARGET=    2300.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1070.00 ELREA=     1081.00

    13.00    15.65  1075.65      .00  1074.91  1076.29      .64     2.39      .20  1070.00
   97200.   45841.   51359.       0.   10267.    6616.       0.     911.     166.   1081.00
      .11     4.46     7.76      .00     .040     .040     .040     .000  1060.00  8000.00
  .001377    1020.    1020.    1020.        2        0        0      .00  2276.82 10276.82
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     13.00          CWSEL=   1075.65

STA=    8000.    8146.    8306.    8414.    8566.    8768.    8917.    9084.    9273.    9395.    9503.    9629.    9793.
  PER Q=      3.8      3.1      3.4      3.9      4.1      4.1      3.6      3.7      4.8      4.3      4.2      4.2
   AREA=    847.4    773.5    692.8    858.3    990.1    875.3    856.5    910.2    895.4    801.8    839.5    926.0
    VEL=      4.4      4.0      4.8      4.4      4.0      4.5      4.1      3.9      5.2      5.2      4.9      4.4
STA=    9793.   10299.
  PER Q=     52.8
   AREA=   6616.0
    VEL=      7.8

*SECNO 13.175

3470 ENCROACHMENT STATIONS=    8000.0   10312.0  TYPE=     1  TARGET=    2312.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1071.00 ELREA=     1083.00

    13.18    14.99  1076.99      .00  1076.08  1077.77      .77     1.44      .04  1071.00
   97200.   40839.   56361.       0.    8522.    6782.       0.    1244.     214.   1083.00
      .14     4.79     8.31      .00     .040     .040     .040     .000  1062.00  8000.00
  .001877     900.     900.     900.        3        0        0      .00  2300.40 10300.40


FLOW DISTRIBUTION FOR SECNO=     13.18          CWSEL=   1076.99

STA=    8000.    8168.    8288.    8468.    8680.    8833.    9027.    9219.    9318.    9411.    9525.    9679.    9726.
  PER Q=      3.6      3.1      3.8      3.3      3.9      3.2      4.4      4.7      3.0      3.0      4.3      1.5
   AREA=    786.1    622.8    831.5    811.8    789.2    763.4    899.9    744.5    557.5    598.9    834.7    281.7
    VEL=      4.5      4.8      4.5      4.0      4.8      4.1      4.8      6.2      5.3      4.9      5.0      5.3
STA=    9726.   10311.
  PER Q=     58.0
   AREA=   6781.6
    VEL=      8.3

*SECNO 13.364

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    8185.0   10525.0  TYPE=     1  TARGET=    2340.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1074.00 ELREA=     1088.00
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


   13.36    13.95  1078.95      .00  1078.19  1079.62      .67     1.85      .01  1074.00
  99000.   22966.   76034.       0.    5086.   10725.       0.    1601.     267.   1088.00
     .19     4.52     7.09      .00     .040     .040     .040     .000  1065.00  8185.00
 .001818    1000.    1000.    1000.        2        0        0      .00  2316.35 10503.49


FLOW DISTRIBUTION FOR SECNO=     13.36          CWSEL=   1078.95

STA=    8185.    8421.    8695.    8982.    9119.    9224.    9342.    9373.   10524.
  PER Q=      3.4      3.5      3.1      4.0      4.3      4.2       .7     76.8
   AREA=    876.3    955.4    828.8    782.7    729.8    759.2    153.5  10725.3
    VEL=      3.8      3.7      3.7      5.1      5.8      5.5      4.6      7.1

*SECNO 13.554

3470 ENCROACHMENT STATIONS=    8100.0   10541.0  TYPE=     1  TARGET=    2441.000
   13.55    13.61  1080.61      .00  1080.05  1081.01      .40     1.36      .03  1077.00
  99000.   15760.   83240.       0.    3866.   15792.       1.    2008.     321.   1080.00
     .24     4.08     5.27      .63     .040     .040     .040     .000  1067.00  8100.00
 .001062    1000.    1000.    1000.        2        0        0      .00  2441.00 10541.00


FLOW DISTRIBUTION FOR SECNO=     13.55          CWSEL=   1080.61

STA=    8100.    8236.    8361.    8518.    8805.   10540.   10541.
  PER Q=      5.2      3.9      3.2      3.7     84.1       .0
   AREA=    991.1    864.9    839.9   1169.8  15792.3       .6
    VEL=      5.2      4.5      3.7      3.1      5.3       .6

*SECNO 13.743

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    7225.0   10740.0  TYPE=     1  TARGET=    3515.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1081.00 ELREA=     1086.00

   13.74     9.02  1082.02  1081.85  1081.97  1083.83     1.81     2.39      .42  1081.00
 100000.    8070.   91930.       0.    1492.    8258.       0.    2346.     384.   1086.00
     .27     5.41    11.13      .00     .040     .040     .040     .000  1073.00  7343.07
 .009393    1000.    1000.    1000.        4       17        0      .00  3051.74 10725.30
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     13.74          CWSEL=   1082.02

STA=    7343.    8028.    9016.    9209.   10739.
  PER Q=      3.1      3.8      1.1     91.9
   AREA=    505.2    756.0    230.7   8257.8
    VEL=      6.2      5.0      5.0     11.1

*SECNO 13.932

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    7100.0   10620.0  TYPE=     1  TARGET=    3520.000
    13.93    12.03  1087.03      .00  1086.98  1087.62      .59     3.67      .12  1083.00
  100000.   28376.   71621.       3.    6766.   10527.       2.    2656.     458.   1085.00
      .31     4.19     6.80     1.25     .040     .040     .040     .000  1075.00  7229.20
  .001945    1000.    1000.    1000.        1        0        0      .00  3390.80 10620.00


FLOW DISTRIBUTION FOR SECNO=     13.93          CWSEL=   1087.03

STA=    7229.    7921.    8379.    8587.    8749.    8895.    9107.    9377.   10619.   10620.
  PER Q=      3.0      3.5      8.7      3.5      3.1      3.3      3.3     71.6       .0
   AREA=   1174.7   1037.8   1450.6    756.5    672.6    775.2    898.2  10527.1      2.0
    VEL=      2.6      3.4      6.0      4.6      4.6      4.2      3.7      6.8      1.3

*SECNO 14.122

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    7575.0   10716.0  TYPE=     1  TARGET=    3141.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1080.00 ELREA=     1091.00

    14.12     9.52  1089.52      .00  1089.18  1090.53     1.01     2.79      .12  1080.00
  101000.   29689.   71311.       0.    5197.    8053.       0.    2993.     526.   1091.00
      .35     5.71     8.86      .00     .040     .040     .040     .000  1080.00  7575.00
  .004623     900.    1000.    1050.        3        0        0      .00  2931.55 10710.78


FLOW DISTRIBUTION FOR SECNO=     14.12          CWSEL=   1089.52

STA=    7575.    7736.    7858.    7992.    8128.    8491.    8786.    8953.    9486.   10715.
  PER Q=      3.1      3.8      4.1      3.2      3.2      4.2      4.3      3.5     70.6
   AREA=    520.8    551.9    606.2    514.7    761.1    837.0    672.0    733.2   8052.9
    VEL=      6.0      6.9      6.9      6.3      4.2      5.1      6.4      4.8      8.9
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 14.311

3470 ENCROACHMENT STATIONS=    8230.0   11350.0  TYPE=     1  TARGET=    3120.000
    14.31    12.13  1093.13      .00  1092.08  1093.75      .62     3.18      .04  1090.00
  102500.   19838.   65459.   17203.    4252.    9347.    3250.    3324.     591.   1090.00
      .39     4.67     7.00     5.29     .040     .040     .040     .000  1081.00  8230.00
  .002463     800.    1000.    1200.        2        0        0      .00  3120.00 11350.00


FLOW DISTRIBUTION FOR SECNO=     14.31          CWSEL=   1093.13

STA=    8230.    8431.    8558.    8919.    9266.    9387.   10648.   10882.   11067.   11179.   11309.   11350.
  PER Q=      3.8      3.8      5.4      3.4      3.0     63.9      3.8      5.2      3.9      3.6       .3
   AREA=    779.7    680.9   1269.6    946.4    575.6   9346.6    878.3    954.1    662.0    666.3     89.7
    VEL=      4.9      5.7      4.4      3.7      5.3      7.0      4.5      5.6      6.0      5.5      3.5

*SECNO 14.501

3470 ENCROACHMENT STATIONS=    8330.0   10935.0  TYPE=     1  TARGET=    2605.000
    14.50    11.91  1095.91      .00  1095.41  1096.82      .91     2.98      .09  1095.00
  102500.   19217.   64263.   19020.    3664.    7878.    2403.    3681.     656.   1090.00
      .43     5.25     8.16     7.91     .040     .040     .040     .000  1084.00  8330.00
  .003559     900.    1000.    1200.        2        0        0      .00  2605.00 10935.00


FLOW DISTRIBUTION FOR SECNO=     14.50          CWSEL=   1095.91

STA=    8330.    8572.    8682.    8891.    9183.    9470.   10585.   10680.   10756.   10824.   10893.   10935.
  PER Q=      3.8      4.5      3.4      4.0      3.0     62.7      5.0      4.1      3.7      3.7      2.1
   AREA=    785.6    639.4    682.8    843.2    712.7   7878.1    642.8    524.6    469.4    476.3    289.9
    VEL=      4.9      7.2      5.1      4.9      4.4      8.2      7.9      8.0      8.0      8.0      7.3

*SECNO 14.690

3470 ENCROACHMENT STATIONS=    8590.0   11100.0  TYPE=     1  TARGET=    2510.000
    14.69    11.24  1099.24      .00  1098.83  1100.06      .83     3.24      .01  1097.00
  102500.   21698.   63583.   17219.    3850.    7878.    2848.    4005.     714.   1094.00
      .47     5.64     8.07     6.05     .040     .040     .040     .000  1088.00  8590.00
  .002999     960.    1000.    1000.        2        0        0      .00  2510.00 11100.00


FLOW DISTRIBUTION FOR SECNO=     14.69          CWSEL=   1099.24

STA=    8590.    8832.    8929.    9000.    9084.    9248.    9492.    9548.   10545.   10693.   10844.   10979.   11100.
  PER Q=      3.8      3.3      3.5      3.5      3.1      3.4       .6     62.0      4.6      4.7      4.2      3.2
   AREA=    738.6    530.0    489.9    523.5    626.5    788.5    153.0   7878.0    774.3    790.0    706.3    577.0
    VEL=      5.2      6.3      7.4      6.9      5.0      4.4      4.0      8.1      6.1      6.1      6.1      5.7
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 14.879
3280 CROSS SECTION     14.88 EXTENDED      2.85 FEET


3470 ENCROACHMENT STATIONS=    9005.0   11800.0  TYPE=     1  TARGET=    2795.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1118.00 ELREA=     1098.00

   14.88    12.85  1101.85      .00  1101.53  1102.38      .52     2.29      .03  1118.00
 102500.       0.   67915.   34585.       0.   10934.    7014.    4371.     773.   1098.00
     .51      .00     6.21     4.93     .040     .040     .040     .000  1089.00  9046.38
 .001858     950.    1000.     950.        2        0        0      .00  2753.62 11800.00


FLOW DISTRIBUTION FOR SECNO=     14.88          CWSEL=   1101.85

STA=    9046.   10475.   10641.   10785.   10930.   11071.   11268.   11424.   11495.   11565.   11715.   11800.
  PER Q=     66.3      3.6      4.0      3.1      3.1      4.3      3.4      3.2      3.4      3.8      1.8
   AREA=  10933.9    807.0    811.3    703.2    683.8    955.3    756.5    531.8    549.5    803.4    412.2
    VEL=      6.2      4.6      5.1      4.6      4.6      4.6      4.6      6.1      6.3      4.9      4.4

*SECNO 15.069

3470 ENCROACHMENT STATIONS=    9026.0   11550.0  TYPE=     1  TARGET=    2524.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1127.00 ELREA=     1099.00

   15.07    15.45  1103.45      .00  1103.04  1103.91      .46     1.52      .01  1127.00
 104000.       0.   85363.   18637.       0.   15152.    4289.    4800.     833.   1099.00
     .57      .00     5.63     4.34     .040     .040     .040     .000  1088.00  9075.09
 .001275    1000.    1000.    1000.        2        0        0      .00  2474.90 11550.00


FLOW DISTRIBUTION FOR SECNO=     15.07          CWSEL=   1103.45

STA=    9075.   10802.   11014.   11204.   11318.   11410.   11550.
  PER Q=     82.1      3.1      3.7      3.5      3.7      3.9
   AREA=  15151.8    917.8    968.9    763.5    731.1    908.0
    VEL=      5.6      3.5      4.0      4.7      5.3      4.5

*SECNO 15.258
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9360.0   11500.0  TYPE=     1  TARGET=    2140.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1131.00 ELREA=     1103.00

    15.26    11.08  1105.08      .00  1104.56  1106.25     1.17     2.13      .21  1131.00
  104000.       0.  101760.    2240.       0.   11626.     580.    5149.     882.   1103.00
      .60      .00     8.75     3.86     .040     .040     .040     .000  1094.00  9408.45
  .004558    1050.    1000.     750.        2        0        0      .00  2091.55 11500.00


FLOW DISTRIBUTION FOR SECNO=     15.26          CWSEL=   1105.08

STA=    9408.   11188.   11230.   11285.   11341.   11399.   11461.   11500.
  PER Q=     97.8       .3       .5       .5       .5       .3       .1
   AREA=  11625.9     87.4    114.5    116.6    120.8     98.1     42.2
    VEL=      8.8      4.1      4.1      4.1      4.1      3.4      2.6

*SECNO 15.454

3470 ENCROACHMENT STATIONS=    9349.0   11492.0  TYPE=     1  TARGET=    2143.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1127.00 ELREA=     1106.00

    15.45    16.02  1109.02      .00  1108.96  1109.79      .77     3.50      .04  1127.00
  105600.       0.  105595.       5.       0.   15041.       3.    5472.     932.   1106.00
      .64      .00     7.02     1.57     .040     .040     .040     .000  1093.00  9375.17
  .002621    1060.    1035.     840.        3        0        0      .00  2116.83 11492.00


FLOW DISTRIBUTION FOR SECNO=     15.45          CWSEL=   1109.02

STA=    9375.   11491.   11492.
  PER Q=    100.0       .0
   AREA=  15041.4      3.0
    VEL=      7.0      1.6

*SECNO 15.647

3470 ENCROACHMENT STATIONS=    9311.0   11600.0  TYPE=     1  TARGET=    2289.000
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 1132.00 ELREA= 1107.00

15.65	14.85	1111.85	.00	1111.39	1112.65	.79	2.85	.01	1132.00
105600.	0.	103017.	2583.	0.	14357.	456.	5820.	983.	1107.00
.68	.00	7.18	5.66	.040	.040	.040	.000	1097.00	9341.10
.003007	1060.	1020.	810.	3	0	0	.00	2258.90	11600.00

FLOW DISTRIBUTION FOR SECNO= 15.65 CWSEL= 1111.85

STA=	9341.	11506.	11566.	11600.
PER Q=	97.6	1.6	.8	
AREA=	14356.7	291.3	165.1	
VEL=	7.2	5.8	5.3	

THIS RUN EXECUTED 09-08-87

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  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
  IBM-PC-XT VERSION AUGUST 1985
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

AGUA FRIA RIVER

SUMMARY PRINTOUT

	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	CWSEL	DIFWSP
	12.357	95800.00	4213.31	9605.00	3.68	5.55	.00	10092.00	10089.00	5550.33	1064.79	.00
	12.357	95800.00	7160.00	9605.00	5.42	6.64	.00	10092.00	10089.30	2803.44	1064.91	.12
*	12.470	96150.00	4592.71	9340.00	4.85	12.45	.00	10205.00	10200.76	3125.09	1064.59	.00
	12.470	96150.00	7448.60	9340.00	5.82	12.21	.00	10205.00	10201.25	1778.61	1064.98	.39
	12.584	96750.00	4935.21	9450.00	3.52	10.20	.00	10416.00	10376.47	3454.43	1067.33	.00
	12.584	96750.00	7900.40	9450.00	4.28	10.69	.00	10416.00	10376.69	2024.89	1067.47	.14
	12.698	96850.00	5146.80	9467.00	3.57	10.92	.00	10539.00	10523.96	3367.85	1068.88	.00
	12.698	96850.00	8100.00	9467.00	3.82	10.53	.00	10539.00	10524.91	2359.69	1069.21	.33
*	12.811	97200.00	5348.72	9551.00	3.31	11.58	.00	10351.00	10305.76	4706.35	1071.75	.00
*	12.811	97200.00	8384.31	9551.00	4.73	13.82	.00	10351.00	10304.13	1905.94	1071.10	-.66
	13.004	97200.00	6227.40	9793.00	3.48	6.83	.00	10299.00	10273.77	4046.38	1074.91	.00
	13.004	97200.00	8000.00	9793.00	4.46	7.76	.00	10299.00	10276.82	2276.82	1075.65	.74
	13.175	97200.00	6452.29	9726.00	4.07	8.25	.00	10311.00	10298.79	3801.77	1076.08	.00
	13.175	97200.00	8000.00	9726.00	4.79	8.31	.00	10311.00	10300.40	2300.40	1076.99	.92
	13.364	99000.00	6979.15	9373.00	3.90	7.22	.00	10524.00	10501.76	3487.63	1078.19	.00
	13.364	99000.00	8185.00	9373.00	4.52	7.09	.00	10524.00	10503.49	2316.35	1078.95	.76
	13.554	99000.00	7016.67	8805.00	4.26	5.69	.00	10540.00	10519.00	2704.55	1080.05	.00
	13.554	99000.00	8100.00	8805.00	4.08	5.27	.63	10540.00	10541.00	2441.00	1080.61	.56
	13.743	100000.00	7344.10	9209.00	5.49	11.28	.00	10739.00	10725.11	2520.50	1081.97	.00
	13.743	100000.00	7343.07	9209.00	5.41	11.13	.00	10739.00	10725.30	3051.74	1082.02	.06
	13.932	100000.00	6533.24	9377.00	3.89	6.57	2.41	10619.00	10849.09	4165.78	1086.98	.00
	13.932	100000.00	7229.20	9377.00	4.19	6.80	1.25	10619.00	10620.00	3390.80	1087.03	.05

SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	CWSEL	DIFWSP
14.122	101000.00	6253.14	9486.00	5.00	6.93	.00	10715.00	10709.81	4232.39	1089.18	.00
14.122	101000.00	7575.00	9486.00	5.71	8.86	.00	10715.00	10710.78	2931.55	1089.52	.34
14.311	102500.00	6469.66	9387.00	4.25	7.22	5.20	10648.00	11336.77	4867.11	1092.08	.00
14.311	102500.00	8230.00	9387.00	4.67	7.00	5.29	10648.00	11350.00	3120.00	1093.13	1.04
14.501	102500.00	7336.55	9470.00	4.56	7.88	6.69	10585.00	11386.84	4050.29	1095.41	.00
14.501	102500.00	8330.00	9470.00	5.25	8.16	7.91	10585.00	10935.00	2605.00	1095.91	.50
14.690	102500.00	8198.19	9548.00	5.32	8.20	5.37	10545.00	11647.82	3449.63	1098.83	.00
14.690	102500.00	8590.00	9548.00	5.64	8.07	6.05	10545.00	11100.00	2510.00	1099.24	.40
14.879	102500.00	9047.19	9006.00	.00	5.84	4.31	10475.00	12720.00	3672.81	1101.53	.00
14.879	102500.00	9046.38	9006.00	.00	6.21	4.93	10475.00	11800.00	2753.62	1101.85	.32
15.069	104000.00	9077.82	9026.00	.00	5.32	3.34	10802.00	13211.67	4133.85	1103.04	.00
15.069	104000.00	9075.09	9026.00	.00	5.63	4.34	10802.00	11550.00	2474.90	1103.45	.41
15.258	104000.00	9409.38	9361.00	.00	9.45	2.59	11188.00	12697.67	3288.28	1104.56	.00
15.258	104000.00	9408.45	9361.00	.00	8.75	3.86	11188.00	11500.00	2091.55	1105.08	.52
15.454	105600.00	9375.25	9350.00	.00	6.62	3.10	11491.00	12667.73	3292.48	1108.96	.00
15.454	105600.00	9375.17	9350.00	.00	7.02	1.57	11491.00	11492.00	2116.83	1109.02	.06
15.647	105600.00	9341.77	9312.00	.00	5.76	3.98	11506.00	14063.99	4722.23	1111.39	.00
15.647	105600.00	9341.10	9312.00	.00	7.18	5.66	11506.00	11600.00	2258.90	1111.85	.46

SUMMARY OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    12.470  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    12.470  PROFILE= 1  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    12.811  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    12.811  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    12.811  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    12.811  PROFILE= 2  MINIMUM SPECIFIC ENERGY
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FLOODWAY DATA, AGUA FRIA RIVER
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
12.357	2929.	16730.	5.7	1064.9	1064.8	.1
12.470	2753.	9426.	10.2	1065.0	1064.6	.4
12.584	2476.	10960.	8.8	1067.4	1067.3	.1
12.698	2425.	11075.	8.7	1069.2	1068.9	.3
12.811	1920.	8871.	11.0	1071.2	1071.8	-.6
13.004	2277.	16883.	5.8	1075.6	1074.9	.7
13.175	2300.	15304.	6.4	1077.0	1076.1	.9
13.364	2318.	15811.	6.3	1079.0	1078.2	.8
13.554	2441.	19659.	5.0	1080.7	1080.1	.6
13.743	3382.	9750.	10.3	1082.1	1082.0	.1
13.932	3391.	17295.	5.8	1087.0	1087.0	.0
14.122	3136.	13250.	7.6	1089.5	1089.2	.3
14.311	3120.	16849.	6.1	1093.1	1092.1	1.0
14.501	2605.	13945.	7.4	1095.9	1095.4	.5
14.690	2510.	14575.	7.0	1099.2	1098.8	.4
14.879	2754.	17948.	5.7	1101.8	1101.5	.3
15.069	2475.	19441.	5.3	1103.4	1103.0	.4
15.258	2092.	12205.	8.5	1105.1	1104.6	.5
15.454	2117.	15044.	7.0	1109.1	1109.0	.1
15.647	2259.	14813.	7.1	1111.9	1111.4	.5

APPENDIX B

HEC-2 Output Data
Revised Model With Olive Avenue Bridge
&
New Discharge Values For New Waddell Dam

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*  IBM-PC-XT VERSION AUGUST 1985                    *
*  RUN DATE  09-08-87   TIME  15:31:30               *
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*************************************
*  U.S. ARMY CORPS OF ENGINEERS     *
*  THE HYDROLOGIC ENGINEERING CENTER *
*  609 SECOND STREET, SUITE D       *
*  DAVIS, CALIFORNIA 95616          *
*  (916) 440-2105 (FTS) 448-2105
*************************************
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```
X     X  XXXXXXX   XXXXX             XXXXX
X     X  X       X     X           X     X
X     X  X       X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X       X                 X
X     X  X       X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
```

THIS RUN EXECUTED 09-08-87

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
  IBM-PC-XT VERSION AUGUST 1985
**************************************************
```

T1 REVISED FLOODPLAIN/FLOODWAY RUN WITH NEW WADDELL DAM IN PLACE
T2 NORTHERN AVENUE TO CACTUS ROAD USING 1984 COE HEC-2 MODEL WITH NEW Q100
T3 AGUA FRIA RIVER INCLUDES NEW BRIDGE AT OLIVE AVENUE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	.004000	.00	.0	0.	1060.000	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1.000	.000	-1.000	.000	.000	.000	-1.000	.000	.000	15.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38.000	43.000	53.000	21.000	55.000	26.000	56.000	22.000	54.000	4.000
1.000	50.000	200.000	.000	.000	.000	.000	.000	.000	.000

NC	.050	.050	.030	.300	.500	.000	.000	.000	.000	.000
QT	2.000	66414.000	66414.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.040	8711.000	.045	9082.000	.030	10092.000	.050	11377.000	.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	12.357	75.000	9605.000	10092.000	600.000	600.000	600.000	.000	.000	.000
GR	1200.000	6370.000	1062.900	6371.000	1063.100	6413.000	1061.700	6445.000	1064.500	6465.000
GR	1064.900	6523.000	1064.500	6586.000	1064.600	6755.000	1065.300	6834.000	1063.900	6956.000
GR	1064.500	7086.000	1063.700	7131.000	1063.700	7162.000	1057.400	7184.000	1057.700	7354.000
GR	1057.100	7473.000	1057.500	7517.000	1057.500	7538.000	1063.100	7571.000	1063.400	7614.000
GR	1051.800	7638.000	1051.800	7707.000	1059.500	7733.000	1063.000	7781.000	1054.600	7800.000
GR	1062.700	7808.000	1062.200	7859.000	1060.000	7893.000	1059.200	7908.000	1058.000	7964.000
GR	1056.000	7988.000	1060.000	8039.000	1060.000	8128.000	1059.000	8171.000	1059.000	8207.000
GR	1060.000	8280.000	1064.000	8312.000	1065.000	8711.000	1065.000	8745.000	1064.300	8817.000
GR	1064.300	8915.000	1063.400	8996.000	1065.000	9047.000	1070.300	9082.000	1057.500	9103.000
GR	1056.400	9152.000	1053.500	9187.000	1052.200	9287.000	1052.700	9334.000	1054.600	9354.000
GR	1056.700	9476.000	1057.400	9605.000	1056.000	9722.000	1053.200	9869.000	1057.800	9881.000
GR	1058.300	9910.000	1055.800	9926.000	1057.100	9966.000	1059.000	9976.000	1056.400	9981.000
GR	1056.700	10000.000	1059.100	10010.000	1056.300	10021.000	1054.700	10064.000	1066.000	10092.000
GR	1068.300	10142.000	1069.400	10258.000	1071.000	10375.000	1071.000	10490.000	1073.200	10594.000
GR	1073.900	10703.000	1075.800	10848.000	1077.800	10984.000	1080.300	11187.000	1086.800	11377.000

NC	.000	.000	.000	.100	.300	.000	.000	.000	.000	.000
NH	6.000	.040	8453.000	.045	8552.000	.060	8907.000	.045	9340.000	.030
NH	10205.000	.035	11470.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	9440.000	10200.000
X1	12.470	51.000	9340.000	10205.000	600.000	600.000	600.000	.000	.000	.000
GR	1200.000	6720.000	1065.800	6721.000	1066.300	6959.000	1066.700	7235.000	1066.500	7333.000
GR	1066.500	7365.000	1065.700	7445.000	1060.900	7469.000	1060.900	7554.000	1060.900	7643.000
GR	1060.900	7676.000	1062.100	7684.000	1065.400	7775.000	1065.400	7889.000	1065.000	7940.000
GR	1061.800	8011.000	1064.600	8027.000	1063.400	8117.000	1060.000	8231.000	1060.000	8351.000
GR	1060.000	8453.000	1061.600	8486.000	1065.500	8552.000	1066.300	8688.000	1066.800	8907.000
GR	1067.400	9094.000	1067.900	9141.000	1066.000	9251.000	1065.000	9340.000	1058.000	9389.000
GR	1057.100	9506.000	1055.600	9559.000	1063.600	9584.000	1056.600	9606.000	1055.200	9789.000
GR	1056.800	9888.000	1055.500	9906.000	1055.800	9926.000	1058.400	9934.000	1059.100	10000.000
GR	1058.300	10118.000	1056.200	10190.000	1067.900	10205.000	1069.400	10391.000	1070.300	10580.000
GR	1072.300	10779.000	1074.300	10935.000	1076.300	11112.000	1076.800	11253.000	1078.400	11383.000
GR	1082.000	11470.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.040	7499.000	.045	9450.000	.030	10416.000	.035	11485.000	.000
ET	.000	.000	9.400	.000	.000	.000	.000	.000	9400.000	10400.000
X1	12.584	51.000	9450.000	10416.000	600.000	600.000	600.000	.000	.000	.000
GR	1200.000	7090.000	1068.200	7091.000	1068.300	7223.000	1068.300	7346.000	1068.200	7499.000
GR	1068.900	7626.000	1067.400	7718.000	1069.300	7808.000	1069.400	7890.000	1062.900	7925.000
GR	1063.300	7966.000	1063.300	8030.000	1065.400	8038.000	1065.000	8092.000	1066.200	8171.000
GR	1065.400	8288.000	1064.000	8330.000	1062.400	8396.000	1061.500	8424.000	1062.600	8491.000
GR	1062.800	8620.000	1061.100	8659.000	1064.300	8701.000	1067.000	8789.000	1068.200	9040.000
GR	1068.300	9265.000	1066.200	9450.000	1057.400	9483.000	1057.000	9588.000	1059.000	9621.000
GR	1057.000	9669.000	1059.100	9751.000	1059.100	9858.000	1058.000	9883.000	1057.400	9979.000
GR	1059.500	10000.000	1060.000	10113.000	1062.400	10171.000	1061.000	10228.000	1061.000	10317.000
GR	1054.600	10334.000	1055.000	10357.000	1068.300	10378.000	1068.300	10416.000	1071.000	10464.000
GR	1071.100	10609.000	1072.600	10782.000	1073.800	10945.000	1074.700	11091.000	1077.100	11301.000
GR	1078.800	11485.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	3.000	.045	9467.000	.030	10539.000	.035	10574.000	.000	.000	.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	12.698	51.000	9467.000	10539.000	600.000	600.000	600.000	.000	.000	.000
GR	1200.000	7430.000	1069.700	7431.000	1069.700	7575.000	1069.700	7601.000	1072.700	7614.000
GR	1069.800	7626.000	1069.800	7744.000	1069.800	7828.000	1067.900	7859.000	1067.300	7962.000
GR	1067.300	8043.000	1063.400	8060.000	1065.000	8070.000	1066.900	8078.000	1067.300	8108.000
GR	1066.500	8142.000	1067.000	8171.000	1070.600	8213.000	1071.400	8222.000	1064.800	8343.000
GR	1064.800	8448.000	1065.500	8572.000	1065.400	8637.000	1064.800	8691.000	1065.800	8735.000
GR	1066.800	8780.000	1064.700	8835.000	1067.900	8898.000	1068.400	9001.000	1068.400	9117.000
GR	1068.600	9257.000	1068.400	9467.000	1065.100	9514.000	1057.800	9531.000	1058.600	9659.000
GR	1061.500	9670.000	1061.500	9699.000	1058.200	9744.000	1059.600	9789.000	1061.800	9823.000
GR	1062.300	9917.000	1058.300	9975.000	1058.300	10000.000	1060.400	10049.000	1062.600	10140.000
GR	1063.400	10294.000	1062.600	10396.000	1062.600	10462.000	1065.000	10513.000	1074.200	10539.000
GR	1074.200	10574.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	2.000	.045	9551.000	.030	10351.000	.000	.000	.000	.000	.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000

X1	12.811	46.000	9551.000	10351.000	600.000	600.000	600.000	.000	.000	.000
GR	1200.000	7770.000	1071.100	7771.000	1071.100	7885.000	1071.100	7906.000	1071.100	7929.000
GR	1071.100	8012.000	1073.900	8024.000	1073.300	8044.000	1073.000	8063.000	1073.300	8120.000
GR	1071.700	8149.000	1071.100	8192.000	1071.700	8218.000	1073.700	8236.000	1073.000	8278.000
GR	1071.100	8299.000	1071.100	8308.000	1071.100	8319.000	1071.100	8333.000	1075.800	8351.000
GR	1071.000	8385.000	1071.000	8399.000	1068.200	8424.000	1068.200	8489.000	1069.400	8591.000
GR	1067.400	8650.000	1066.300	8781.000	1067.800	8928.000	1068.800	9090.000	1069.600	9263.000
GR	1070.300	9434.000	1071.200	9551.000	1066.200	9581.000	1064.800	9615.000	1061.100	9631.000
GR	1063.600	9704.000	1061.000	9764.000	1061.400	9895.000	1060.400	9984.000	1061.500	10000.000
GR	1063.000	10122.000	1065.800	10214.000	1065.400	10290.000	1077.900	10321.000	1079.600	10340.000
GR	1080.600	10351.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.040	.040	.040	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	9108.000	10299.000
X1	13.004	50.000	9793.000	10299.000	1020.000	1020.000	1020.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GR	1200.000	8330.000	1069.000	8331.000	1067.000	8342.000	1070.000	8379.000	1070.000	8414.000
GR	1070.000	8471.000	1070.000	8518.000	1070.000	8566.000	1071.000	8615.000	1071.000	8660.000
GR	1071.000	8714.000	1070.000	8768.000	1071.000	8814.000	1069.000	8860.000	1069.000	8917.000
GR	1072.000	8970.000	1070.000	9030.000	1070.000	9084.000	1071.000	9148.000	1071.000	9210.000
GR	1071.000	9273.000	1067.000	9300.000	1068.000	9337.000	1069.000	9395.000	1068.000	9443.000
GR	1068.000	9503.000	1069.000	9568.000	1070.000	9629.000	1070.000	9687.000	1070.000	9744.000
GR	1070.000	9793.000	1063.000	9810.000	1062.000	9850.000	1060.000	9897.000	1061.000	9935.000
GR	1070.000	9949.000	1061.000	9967.000	1061.000	10000.000	1061.000	10045.000	1061.000	10084.000
GR	1061.000	10138.000	1061.000	10198.000	1061.000	10255.000	1074.000	10270.000	1081.000	10299.000
GR	1079.000	10319.000	1077.000	10353.000	1073.000	10392.000	1073.000	10430.000	1073.000	10452.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	13.175	45.000	9726.000	10311.000	900.000	900.000	900.000	.000	.000	.000
GR	1200.000	8520.000	1073.300	8521.000	1074.000	8567.000	1074.000	8608.000	1073.000	8643.000
GR	1071.000	8680.000	1072.000	8730.000	1072.000	8775.000	1072.000	8833.000	1074.000	8880.000
GR	1074.000	8921.000	1072.000	8968.000	1073.000	9027.000	1073.000	9082.000	1073.000	9112.000
GR	1074.000	9163.000	1070.000	9178.000	1069.000	9219.000	1069.000	9271.000	1071.000	9318.000
GR	1071.000	9358.000	1071.000	9411.000	1072.000	9470.000	1072.000	9525.000	1072.000	9588.000
GR	1071.000	9639.000	1071.000	9679.000	1071.000	9726.000	1068.000	9741.000	1066.000	9760.000
GR	1062.000	9786.000	1064.000	9819.000	1064.000	9879.000	1064.000	9949.000	1064.000	10000.000
GR	1064.000	10021.000	1064.000	10060.000	1064.000	10094.000	1066.000	10135.000	1067.000	10180.000
GR	1067.000	10229.000	1066.000	10281.000	1083.000	10311.000	1079.000	10329.000	1080.000	10355.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	13.364	47.000	9373.000	10524.000	1000.000	1000.000	1000.000	.000	.000	.000
GR	1200.000	8830.000	1078.700	8831.000	1079.000	8838.000	1074.000	8849.000	1074.000	8859.000
GR	1078.000	8877.000	1076.000	8895.000	1074.000	8933.000	1074.000	8982.000	1074.000	9038.000
GR	1073.000	9055.000	1072.000	9119.000	1072.000	9173.000	1072.000	9224.000	1072.000	9281.000
GR	1074.000	9342.000	1074.000	9373.000	1071.000	9409.000	1070.000	9430.000	1065.000	9471.000
GR	1066.000	9503.000	1065.000	9549.000	1066.000	9610.000	1068.000	9624.000	1068.000	9698.000
GR	1069.000	9754.000	1069.000	9819.000	1069.000	9878.000	1069.000	9940.000	1069.000	10000.000
GR	1069.000	10010.000	1068.000	10044.000	1068.000	10097.000	1069.000	10145.000	1070.000	10198.000
GR	1070.000	10259.000	1070.000	10295.000	1073.000	10309.000	1075.000	10362.000	1075.000	10393.000
GR	1074.000	10414.000	1073.000	10444.000	1073.000	10490.000	1088.000	10524.000	1089.000	10539.000
GR	1081.000	10574.000	1082.000	10618.000	.000	.000	.000	.000	.000	.000

ET	.000	.000	9.100	.000	.000	.000	.000	.000	9100.000	10250.000
NC	.000	.000	.030	.300	.500	.000	.000	.000	.000	.000
X1	13.410	28.000	8947.000	10450.000	350.000	340.000	340.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	1080.800	1089.900	.000
GR	1099.200	6487.000	1091.100	6807.000	1089.800	6887.000	1080.800	7007.000	1080.800	7087.000
GR	1090.600	7527.000	1090.600	7727.000	1088.800	8167.000	1088.300	8327.000	1088.400	8407.000
GR	1089.200	8567.000	1093.000	8947.000	1085.000	8953.000	1076.900	8968.000	1075.000	9068.000
GR	1072.200	9188.000	1069.300	9328.000	1068.400	9454.000	1068.400	9730.000	1069.200	9870.000
GR	1071.400	10010.000	1074.400	10130.000	1080.400	10310.000	1083.700	10439.000	1093.000	10450.000
GR	1090.400	10730.000	1089.900	10910.000	1091.900	11330.000	.000	.000	.000	.000
SB	1.050	1.560	2.900	.000	1445.000	104.500	26232.000	2.000	1070.600	1070.600
ET	.000	.000	9.410	.000	.000	.000	.000	.000	.000	.000
X1	13.420	27.000	8947.000	10450.000	80.000	80.000	80.000	.000	.000	.000
X2	.000	.000	1.000	1089.700	1080.800	.000	.000	1.330	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	1080.800	1089.900	.000
BT	-21.000	6487.000	1099.200	.000	6807.000	1091.100	.000	6887.000	1089.800	.000
BT	.000	7007.000	1080.800	.000	7087.000	1080.800	.000	7527.000	1090.600	.000
BT	.000	7727.000	1090.600	.000	8167.000	1088.800	.000	8327.000	1088.300	.000
BT	.000	8407.000	1088.400	.000	8567.000	1089.200	.000	8946.000	1093.000	.000
BT	.000	8947.000	1096.000	.000	9321.000	1098.800	.000	9696.000	1099.700	.000
BT	.000	10071.000	1098.800	.000	10450.000	1096.000	.000	10451.000	1093.000	.000
BT	.000	10730.000	1090.400	.000	10910.000	1089.900	.000	11330.000	1091.900	.000
GR	1099.200	6487.000	1091.100	6807.000	1089.800	6887.000	1080.800	7007.000	1080.800	7087.000
GR	1090.600	7527.000	1090.600	7727.000	1088.800	8167.000	1088.300	8327.000	1088.400	8407.000
GR	1089.200	8567.000	1093.000	8947.000	1085.000	8953.000	1076.900	8968.000	1075.800	9028.000
GR	1072.600	9128.000	1071.400	9188.000	1069.300	9328.000	1068.400	9454.000	1068.800	9850.000
GR	1068.800	10330.000	1069.000	10410.000	1083.700	10439.000	1093.000	10450.000	1090.400	10730.000
GR	1089.900	10910.000	1091.900	11330.000	.000	.000	.000	.000	.000	.000
QT	2.000	63865.000	63865.000	.000	.000	.000	.000	.000	.000	.000
NC	.000	.000	.040	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	9000.000	10540.000
X1	13.554	47.000	8805.000	10540.000	575.000	600.000	600.000	.000	.000	.000
GR	1200.000	8320.000	1073.500	8321.000	1071.000	8331.000	1073.000	8361.000	1075.000	8390.000
GR	1075.000	8448.000	1077.000	8518.000	1077.000	8597.000	1076.000	8676.000	1076.000	8735.000
GR	1077.000	8805.000	1076.000	8870.000	1076.000	8923.000	1071.000	8949.000	1071.000	9001.000
GR	1071.000	9060.000	1070.000	9109.000	1069.000	9170.000	1070.000	9236.000	1069.000	9293.000
GR	1071.000	9337.000	1072.000	9397.000	1073.000	9454.000	1073.000	9512.000	1073.000	9581.000
GR	1074.000	9656.000	1074.000	9719.000	1074.000	9778.000	1074.000	9846.000	1074.000	9899.000
GR	1073.000	10000.000	1069.000	10068.000	1068.000	10114.000	1070.000	10175.000	1069.000	10234.000
GR	1069.000	10300.000	1069.000	10344.000	1069.000	10398.000	1067.000	10428.000	1068.000	10519.000
GR	1080.000	10540.000	1080.000	10541.000	1080.000	10835.000	1080.000	10836.000	1083.000	10876.000
GR	1083.000	10919.000	1087.000	10940.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	13.743	80.000	9209.000	10739.000	1000.000	1000.000	1000.000	.000	.000	.000
GR	1200.000	7270.000	1083.000	7271.000	1083.000	7301.000	1082.000	7344.000	1078.000	7356.000
GR	1078.000	7368.000	1080.000	7396.000	1082.000	7430.000	1084.000	7468.000	1084.000	7509.000
GR	1084.000	7545.000	1085.000	7589.000	1081.000	7605.000	1081.000	7644.000	1082.000	7679.000
GR	1082.000	7724.000	1083.000	7772.000	1083.000	7818.000	1079.000	7836.000	1079.000	7847.000
GR	1082.000	7876.000	1082.000	7921.000	1082.000	7968.000	1078.000	7997.000	1080.000	8028.000
GR	1081.000	8069.000	1083.000	8111.000	1082.000	8154.000	1082.000	8209.000	1082.000	8261.000

GR	1082.000	8536.000	1081.000	8592.000	1081.000	8657.000	1080.000	8724.000	1081.000	8763.000
GR	1081.000	8795.000	1081.000	8856.000	1081.000	8917.000	1079.000	8956.000	1079.000	8969.000
GR	1079.000	9016.000	1080.000	9059.000	1081.000	9081.000	1082.000	9118.000	1081.000	9165.000
GR	1081.000	9209.000	1076.000	9229.000	1076.000	9266.000	1077.000	9314.000	1077.000	9375.000
GR	1077.000	9435.000	1078.000	9498.000	1078.000	9563.000	1078.000	9627.000	1078.000	9685.000
GR	1078.000	9744.000	1077.000	9801.000	1074.000	9837.000	1074.000	9889.000	1076.000	9949.000
GR	1076.000	10000.000	1076.000	10062.000	1075.000	10126.000	1078.000	10148.000	1080.000	10180.000
GR	1079.000	10241.000	1079.000	10302.000	1076.000	10324.000	1076.000	10375.000	1073.000	10396.000
GR	1073.000	10460.000	1076.000	10500.000	1077.000	10551.000	1076.000	10608.000	1074.000	10649.000
GR	1073.000	10681.000	1077.000	10708.000	1086.000	10739.000	1089.000	10786.000	1090.000	10835.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	13.932	95.000	9377.000	10619.000	1000.000	1000.000	1000.000	.000	.000	.000
GR	1200.000	6530.000	1087.000	6531.000	1086.000	6548.000	1085.000	6583.000	1084.000	6624.000
GR	1086.000	6648.000	1086.000	6682.000	1083.000	6720.000	1083.000	6760.000	1083.000	6808.000
GR	1085.000	6845.000	1086.000	6895.000	1086.000	6932.000	1086.000	6986.000	1085.000	7023.000
GR	1086.000	7039.000	1087.000	7080.000	1088.000	7117.000	1088.000	7170.000	1088.000	7224.000
GR	1085.000	7240.000	1085.000	7279.000	1084.000	7321.000	1082.000	7341.000	1083.000	7355.000
GR	1085.000	7372.000	1086.000	7390.000	1086.000	7435.000	1086.000	7494.000	1085.000	7544.000
GR	1085.000	7585.000	1086.000	7627.000	1086.000	7676.000	1086.000	7725.000	1086.000	7774.000
GR	1085.000	7818.000	1085.000	7861.000	1085.000	7921.000	1086.000	7976.000	1086.000	8137.000
GR	1085.000	8191.000	1084.000	8241.000	1083.000	8287.000	1083.000	8331.000	1081.000	8379.000
GR	1080.000	8400.000	1080.000	8587.000	1083.000	8636.000	1083.000	8687.000	1082.000	8749.000
GR	1083.000	8811.000	1083.000	8868.000	1079.000	8895.000	1080.000	8919.000	1084.000	8932.000
GR	1084.000	8980.000	1084.000	9034.000	1084.000	9107.000	1084.000	9171.000	1084.000	9260.000
GR	1083.000	9331.000	1083.000	9377.000	1079.000	9386.000	1080.000	9435.000	1080.000	9500.000
GR	1080.000	9578.000	1080.000	9643.000	1079.000	9680.000	1075.000	9696.000	1075.000	9760.000
GR	1077.000	9838.000	1079.000	9890.000	1078.000	9939.000	1077.000	10000.000	1077.000	10050.000
GR	1077.000	10110.000	1078.000	10167.000	1078.000	10230.000	1079.000	10289.000	1080.000	10322.000
GR	1080.000	10357.000	1080.000	10412.000	1080.000	10465.000	1079.000	10502.000	1078.000	10558.000
GR	1080.000	10588.000	1085.000	10619.000	1085.000	10640.000	1085.000	10696.000	1085.000	10739.000
GR	1085.000	10786.000	1086.000	10839.000	1090.000	10880.000	1092.000	10936.000	1090.000	10978.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	7950.000	10708.000
NC	.000	.000	.000	.100	.300	.000	.000	.000	.000	.000
X1	14.122	95.000	9486.000	10715.000	900.000	1050.000	1000.000	.000	.000	.000
GR	1113.000	6146.000	1113.000	6182.000	1097.000	6217.000	1089.000	6254.000	1084.000	6289.000
GR	1084.000	6315.000	1087.000	6333.000	1087.000	6397.000	1086.000	6463.000	1087.000	6527.000
GR	1086.000	6580.000	1086.000	6631.000	1085.000	6684.000	1084.000	6743.000	1084.000	6805.000
GR	1083.000	6873.000	1082.000	6946.000	1081.000	7011.000	1081.000	7061.000	1091.000	7076.000
GR	1085.000	7094.000	1086.000	7142.000	1086.000	7194.000	1087.000	7271.000	1087.000	7340.000
GR	1086.000	7400.000	1087.000	7459.000	1087.000	7526.000	1088.000	7575.000	1087.000	7632.000
GR	1087.000	7670.000	1084.000	7692.000	1085.000	7736.000	1085.000	7792.000	1085.000	7858.000
GR	1085.000	7927.000	1085.000	7992.000	1085.000	8047.000	1086.000	8088.000	1088.000	8128.000
GR	1087.000	8175.000	1087.000	8224.000	1088.000	8287.000	1088.000	8353.000	1087.000	8421.000
GR	1087.000	8491.000	1087.000	8542.000	1087.000	8603.000	1087.000	8664.000	1086.000	8723.000
GR	1086.000	8786.000	1086.000	8846.000	1085.000	8893.000	1085.000	8953.000	1087.000	9000.000
GR	1087.000	9061.000	1088.000	9134.000	1088.000	9208.000	1090.000	9273.000	1091.000	9330.000
GR	1091.000	9403.000	1091.000	9458.000	1080.000	9486.000	1080.000	9552.000	1080.000	9614.000
GR	1081.000	9662.000	1082.000	9714.000	1082.000	9780.000	1082.000	9839.000	1084.000	9878.000
GR	1084.000	9920.000	1084.000	9973.000	1084.000	10000.000	1084.000	10027.000	1084.000	10071.000
GR	1084.000	10110.000	1084.000	10171.000	1084.000	10232.000	1083.000	10290.000	1084.000	10334.000
GR	1083.000	10369.000	1081.000	10392.000	1082.000	10426.000	1081.000	10479.000	1081.000	10510.000
GR	1086.000	10531.000	1084.000	10549.000	1084.000	10566.000	1087.000	10580.000	1086.000	10629.000

GR	1084.000	10671.000	1084.000	10695.000	1091.000	10715.000	1091.000	10764.000	1091.000	10789.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	8350.000	10648.000
X1	14.311	95.000	9387.000	10648.000	800.000	1200.000	1000.000	.000	.000	.000
GR	1110.000	6427.000	1089.000	6477.000	1090.000	6541.000	1090.000	6598.000	1091.000	6661.000
GR	1089.000	6725.000	1088.000	6771.000	1088.000	6830.000	1087.000	6855.000	1089.000	6881.000
GR	1091.000	6944.000	1090.000	7011.000	1089.000	7082.000	1088.000	7125.000	1089.000	7161.000
GR	1092.000	7193.000	1087.000	7216.000	1089.000	7249.000	1089.000	7314.000	1088.000	7367.000
GR	1089.000	7419.000	1089.000	7451.000	1089.000	7514.000	1090.000	7586.000	1090.000	7654.000
GR	1090.000	7712.000	1090.000	7778.000	1090.000	7839.000	1090.000	7911.000	1091.000	7980.000
GR	1091.000	8043.000	1090.000	8104.000	1090.000	8140.000	1091.000	8201.000	1090.000	8254.000
GR	1091.000	8313.000	1090.000	8354.000	1087.000	8370.000	1087.000	8431.000	1088.000	8491.000
GR	1088.000	8558.000	1087.000	8602.000	1090.000	8623.000	1090.000	8919.000	1091.000	8976.000
GR	1091.000	9099.000	1090.000	9162.000	1090.000	9221.000	1088.000	9266.000	1087.000	9303.000
GR	1089.000	9345.000	1090.000	9387.000	1085.000	9427.000	1082.000	9459.000	1082.000	9517.000
GR	1083.000	9550.000	1087.000	9582.000	1086.000	9646.000	1085.000	9701.000	1084.000	9726.000
GR	1086.000	9764.000	1088.000	9800.000	1088.000	9844.000	1087.000	9894.000	1088.000	9923.000
GR	1089.000	9951.000	1089.000	10000.000	1088.000	10032.000	1087.000	10066.000	1087.000	10102.000
GR	1087.000	10161.000	1087.000	10213.000	1086.000	10266.000	1085.000	10303.000	1086.000	10353.000
GR	1084.000	10393.000	1083.000	10451.000	1083.000	10503.000	1081.000	10531.000	1083.000	10572.000
GR	1086.000	10614.000	1090.000	10648.000	1089.000	10707.000	1089.000	10767.000	1090.000	10821.000
GR	1089.000	10882.000	1089.000	10945.000	1087.000	10998.000	1087.000	11067.000	1087.000	11131.000
GR	1088.000	11179.000	1088.000	11242.000	1088.000	11309.000	1093.000	11343.000	1094.000	11406.000
ET	.000	.000	9.400	.000	.000	.000	.000	.000	.000	.000
X1	14.501	95.000	9470.000	10585.000	900.000	1200.000	1000.000	.000	.000	.000
GR	1116.000	7112.000	1117.000	7160.000	1117.000	7191.000	1121.000	7218.000	1121.000	7261.000
GR	1106.000	7304.000	1092.000	7347.000	1092.000	7404.000	1093.000	7478.000	1093.000	7553.000
GR	1093.000	7626.000	1091.000	7653.000	1090.000	7678.000	1093.000	7694.000	1093.000	7766.000
GR	1093.000	7812.000	1094.000	7871.000	1094.000	7943.000	1094.000	8002.000	1094.000	8062.000
GR	1094.000	8133.000	1094.000	8203.000	1093.000	8277.000	1093.000	8333.000	1093.000	8406.000
GR	1091.000	8450.000	1094.000	8469.000	1093.000	8518.000	1091.000	8572.000	1091.000	8611.000
GR	1089.000	8653.000	1089.000	8682.000	1092.000	8709.000	1093.000	8778.000	1093.000	8839.000
GR	1094.000	8891.000	1094.000	8940.000	1095.000	9000.000	1092.000	9035.000	1093.000	9090.000
GR	1092.000	9131.000	1090.000	9144.000	1092.000	9183.000	1092.000	9247.000	1094.000	9309.000
GR	1094.000	9372.000	1094.000	9423.000	1095.000	9470.000	1091.000	9489.000	1091.000	9553.000
GR	1091.000	9623.000	1091.000	9687.000	1091.000	9753.000	1091.000	9812.000	1091.000	9873.000
GR	1091.000	9916.000	1088.000	9971.000	1088.000	10000.000	1088.000	10053.000	1089.000	10101.000
GR	1089.000	10152.000	1085.000	10206.000	1085.000	10273.000	1085.000	10329.000	1084.000	10382.000
GR	1085.000	10409.000	1089.000	10460.000	1089.000	10526.000	1090.000	10585.000	1089.000	10611.000
GR	1089.000	10680.000	1089.000	10756.000	1089.000	10824.000	1089.000	10893.000	1089.000	10939.000
GR	1095.000	10952.000	1092.000	10970.000	1092.000	11034.000	1093.000	11092.000	1094.000	11159.000
GR	1094.000	11223.000	1094.000	11290.000	1095.000	11357.000	1096.000	11431.000	1097.000	11504.000
GR	1097.000	11581.000	1097.000	11622.000	1097.000	11654.000	1097.000	11721.000	1097.000	11783.000
GR	1097.000	11843.000	1097.000	11863.000	1097.000	11901.000	1097.000	11936.000	1101.000	11952.000
QT	2.000	62049.000	62049.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.400	.000	.000	.000	.000	.000	.000	.000
X1	14.690	90.000	9548.000	10545.000	960.000	1000.000	1000.000	.000	.000	.000
GR	1120.000	7915.000	1121.000	7949.000	1122.000	8000.000	1123.000	8051.000	1123.000	8094.000
GR	1124.000	8133.000	1114.000	8165.000	1098.000	8200.000	1098.000	8252.000	1096.000	8273.000
GR	1096.000	8322.000	1096.000	8346.000	1096.000	8389.000	1096.000	8443.000	1097.000	8454.000
GR	1095.000	8463.000	1095.000	8495.000	1098.000	8510.000	1098.000	8560.000	1098.000	8595.000
GR	1098.000	8649.000	1098.000	8697.000	1096.000	8733.000	1093.000	8751.000	1094.000	8786.000

GR	1094.000	8832.000	1094.000	8884.000	1093.000	8929.000	1092.000	8976.000	1092.000	9000.000
GR	1094.000	9084.000	1095.000	9132.000	1096.000	9181.000	1096.000	9248.000	1096.000	9306.000
GR	1096.000	9372.000	1096.000	9430.000	1096.000	9492.000	1097.000	9548.000	1096.000	9587.000
GR	1095.000	9621.000	1095.000	9671.000	1094.000	9713.000	1093.000	9777.000	1091.000	9824.000
GR	1091.000	9864.000	1091.000	9920.000	1089.000	9954.000	1089.000	10000.000	1088.000	10057.000
GR	1089.000	10111.000	1089.000	10183.000	1089.000	10258.000	1089.000	10308.000	1091.000	10363.000
GR	1092.000	10430.000	1093.000	10491.000	1094.000	10545.000	1094.000	10622.000	1094.000	10693.000
GR	1094.000	10770.000	1094.000	10844.000	1094.000	10915.000	1094.000	10979.000	1094.000	11042.000
GR	1096.000	11102.000	1096.000	11150.000	1097.000	11207.000	1097.000	11272.000	1097.000	11348.000
GR	1098.000	11423.000	1098.000	11500.000	1098.000	11579.000	1099.000	11662.000	1099.000	11737.000
GR	1099.000	11811.000	1099.000	11875.000	1099.000	11949.000	1099.000	12023.000	1099.000	12111.000
GR	1099.000	12190.000	1101.000	12260.000	1100.000	12329.000	1101.000	12401.000	1101.000	12465.000
GR	1103.000	12520.000	1103.000	12552.000	1103.000	12625.000	1103.000	12729.000	1103.000	12843.000
ET	.000	7.100	9.400	.000	.000	.000	.000	12816.000	.000	.000
X1	14.879	70.000	9006.000	10475.000	950.000	950.000	1000.000	.000	.000	.000
GR	1105.000	8665.000	1117.000	8707.000	1132.000	8752.000	1131.000	8812.000	1130.000	8870.000
GR	1131.000	8901.000	1131.000	8928.000	1127.000	8959.000	1118.000	9006.000	1098.000	9056.000
GR	1098.000	9103.000	1097.000	9159.000	1097.000	9209.000	1098.000	9260.000	1099.000	9302.000
GR	1098.000	9353.000	1097.000	9402.000	1095.000	9456.000	1094.000	9510.000	1093.000	9565.000
GR	1092.000	9622.000	1091.000	9656.000	1095.000	9677.000	1095.000	9728.000	1095.000	9783.000
GR	1097.000	9823.000	1092.000	9875.000	1092.000	9905.000	1091.000	9942.000	1089.000	10000.000
GR	1089.000	10031.000	1090.000	10051.000	1091.000	10092.000	1091.000	10131.000	1091.000	10177.000
GR	1092.000	10218.000	1090.000	10255.000	1090.000	10300.000	1089.000	10331.000	1094.000	10346.000
GR	1097.000	10362.000	1097.000	10419.000	1098.000	10475.000	1097.000	10556.000	1096.000	10641.000
GR	1096.000	10723.000	1097.000	10785.000	1097.000	10857.000	1097.000	10930.000	1097.000	10998.000
GR	1097.000	11071.000	1097.000	11140.000	1097.000	11201.000	1097.000	11268.000	1097.000	11323.000
GR	1097.000	11386.000	1097.000	11424.000	1094.000	11441.000	1094.000	11495.000	1094.000	11539.000
GR	1094.000	11565.000	1097.000	11581.000	1097.000	11611.000	1096.000	11662.000	1097.000	11715.000
GR	1097.000	11780.000	1097.000	11849.000	1097.000	11931.000	1097.000	12017.000	1097.000	12101.000
ET	.000	.000	9.400	.000	.000	.000	.000	.000	.000	.000
X1	15.069	61.000	9026.000	10802.000	1000.000	1000.000	1000.000	.000	.000	.000
GR	1128.000	8922.000	1130.000	8951.000	1129.000	9002.000	1127.000	9026.000	1105.000	9065.000
GR	1101.000	9091.000	1098.000	9131.000	1099.000	9159.000	1100.000	9202.000	1096.000	9234.000
GR	1092.000	9248.000	1091.000	9294.000	1092.000	9344.000	1093.000	9404.000	1096.000	9438.000
GR	1096.000	9500.000	1095.000	9552.000	1094.000	9610.000	1094.000	9664.000	1094.000	9719.000
GR	1093.000	9785.000	1090.000	9799.000	1089.000	9838.000	1088.000	9886.000	1089.000	9923.000
GR	1096.000	9950.000	1096.000	10000.000	1096.000	10059.000	1096.000	10111.000	1095.000	10173.000
GR	1095.000	10235.000	1096.000	10295.000	1094.000	10357.000	1094.000	10403.000	1095.000	10433.000
GR	1095.000	10499.000	1095.000	10548.000	1097.000	10579.000	1096.000	10636.000	1094.000	10653.000
GR	1092.000	10688.000	1098.000	10701.000	1095.000	10743.000	1095.000	10786.000	1099.000	10802.000
GR	1099.000	10858.000	1099.000	10915.000	1100.000	10965.000	1098.000	11014.000	1099.000	11073.000
GR	1099.000	11119.000	1098.000	11152.000	1097.000	11204.000	1097.000	11261.000	1096.000	11318.000
GR	1095.000	11372.000	1096.000	11410.000	1097.000	11451.000	1097.000	11505.000	1098.000	11572.000
GR	1098.000	11633.000	.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	15.258	85.000	9361.000	11188.000	1050.000	750.000	1000.000	.000	.000	.000
GR	1132.000	9201.000	1133.000	9251.000	1132.000	9302.000	1131.000	9361.000	1112.000	9396.000
GR	1097.000	9423.000	1095.000	9451.000	1094.000	9502.000	1094.000	9562.000	1094.000	9621.000
GR	1094.000	9691.000	1098.000	9711.000	1098.000	9770.000	1099.000	9826.000	1099.000	9889.000
GR	1098.000	9942.000	1098.000	9986.000	1098.000	10000.000	1099.000	10059.000	1099.000	10111.000
GR	1098.000	10170.000	1098.000	10228.000	1097.000	10240.000	1100.000	10266.000	1101.000	10317.000

GR	1101.000	10372.000	1102.000	10425.000	1102.000	10482.000	1102.000	10539.000	1102.000	10592.000
GR	1101.000	10624.000	1098.000	10654.000	1099.000	10701.000	1098.000	10760.000	1099.000	10809.000
GR	1099.000	10854.000	1101.000	10878.000	1098.000	10911.000	1098.000	10940.000	1097.000	10990.000
GR	1096.000	11010.000	1099.000	11031.000	1099.000	11080.000	1098.000	11119.000	1098.000	11131.000
GR	1102.000	11153.000	1103.000	11188.000	1103.000	11230.000	1103.000	11285.000	1103.000	11341.000
GR	1103.000	11399.000	1104.000	11461.000	1104.000	11525.000	1104.000	11593.000	1104.000	11664.000
GR	1104.000	11733.000	1104.000	11792.000	1104.000	11855.000	1104.000	11931.000	1104.000	11992.000
GR	1104.000	12162.000	1104.000	12244.000	1104.000	12276.000	1104.000	12352.000	1104.000	12430.000
GR	1104.000	12508.000	1104.000	12594.000	1104.000	12680.000	1107.000	12774.000	1107.000	12852.000
GR	1107.000	12942.000	1107.000	13031.000	1107.000	13119.000	1107.000	13213.000	1107.000	13300.000
GR	1108.000	13370.000	1108.000	13441.000	1112.000	13484.000	1112.000	13559.000	1111.000	13616.000
GR	1111.000	13718.000	1111.000	13807.000	1110.000	13901.000	1110.000	13988.000	1110.000	14071.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	15.454	85.000	9350.000	11491.000	1060.000	840.000	1035.000	.000	.000	.000
GR	1127.000	9230.000	1126.000	9276.000	1129.000	9293.000	1129.000	9325.000	1127.000	9350.000
GR	1097.000	9392.000	1098.000	9440.000	1098.000	9492.000	1098.000	9552.000	1095.000	9598.000
GR	1096.000	9642.000	1093.000	9681.000	1094.000	9705.000	1095.000	9733.000	1099.000	9771.000
GR	1102.000	9812.000	1103.000	9861.000	1103.000	9909.000	1102.000	9956.000	1102.000	10000.000
GR	1102.000	10066.000	1101.000	10116.000	1100.000	10167.000	1101.000	10219.000	1102.000	10280.000
GR	1102.000	10324.000	1104.000	10361.000	1104.000	10418.000	1104.000	10483.000	1106.000	10544.000
GR	1106.000	10607.000	1106.000	10673.000	1106.000	10740.000	1105.000	10817.000	1105.000	10885.000
GR	1105.000	10950.000	1101.000	10968.000	1101.000	11023.000	1101.000	11073.000	1103.000	11099.000
GR	1103.000	11132.000	1103.000	11159.000	1103.000	11191.000	1102.000	11221.000	1101.000	11282.000
GR	1101.000	11348.000	1102.000	11390.000	1105.000	11441.000	1106.000	11491.000	1106.000	11541.000
GR	1106.000	11601.000	1106.000	11665.000	1106.000	11724.000	1106.000	11790.000	1106.000	11844.000
GR	1106.000	11906.000	1107.000	11954.000	1108.000	11998.000	1107.000	12058.000	1107.000	12104.000
GR	1107.000	12173.000	1108.000	12243.000	1108.000	12323.000	1108.000	12401.000	1108.000	12470.000
GR	1108.000	12532.000	1108.000	12571.000	1109.000	12671.000	1109.000	12747.000	1109.000	12829.000
GR	1110.000	12912.000	1110.000	12978.000	1110.000	13052.000	1110.000	13143.000	1110.000	13225.000
GR	1111.000	13313.000	1111.000	13383.000	1110.000	13451.000	1111.000	13528.000	1113.000	13611.000
GR	1113.000	13701.000	1111.000	13784.000	1111.000	13861.000	1110.000	13942.000	1110.000	13983.000
QT	2.000	60605.000	60605.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	10.400	.000	.000	.000	.000	.000	.000	.000
X1	15.647	75.000	9312.000	11506.000	1060.000	810.000	1020.000	.000	.000	.000
GR	1133.000	8960.000	1132.000	9020.000	1129.000	9053.000	1116.000	9102.000	1112.000	9132.000
GR	1111.000	9180.000	1117.000	9218.000	1121.000	9247.000	1132.000	9282.000	1132.000	9312.000
GR	1105.000	9351.000	1097.000	9377.000	1097.000	9442.000	1097.000	9507.000	1097.000	9552.000
GR	1100.000	9589.000	1102.000	9625.000	1106.000	9645.000	1106.000	9697.000	1103.000	9744.000
GR	1104.000	9760.000	1108.000	9783.000	1108.000	9832.000	1108.000	9886.000	1108.000	9941.000
GR	1107.000	10000.000	1107.000	10026.000	1103.000	10033.000	1103.000	10080.000	1103.000	10134.000
GR	1105.000	10152.000	1105.000	10213.000	1104.000	10262.000	1103.000	10293.000	1103.000	10387.000
GR	1106.000	10402.000	1107.000	10463.000	1107.000	10531.000	1109.000	10588.000	1109.000	10650.000
GR	1109.000	10717.000	1108.000	10775.000	1108.000	10857.000	1110.000	10925.000	1108.000	10993.000
GR	1108.000	11065.000	1108.000	11134.000	1108.000	11178.000	1104.000	11194.000	1104.000	11251.000
GR	1104.000	11297.000	1103.000	11348.000	1103.000	11402.000	1102.000	11441.000	1106.000	11460.000
GR	1107.000	11506.000	1107.000	11566.000	1107.000	11644.000	1107.000	11712.000	1107.000	11791.000
GR	1107.000	11868.000	1107.000	11941.000	1107.000	12010.000	1107.000	12080.000	1107.000	12151.000
GR	1107.000	12223.000	1107.000	12302.000	1107.000	12391.000	1108.000	12469.000	1108.000	12532.000
GR	1108.000	12610.000	1108.000	12703.000	1108.000	12785.000	1109.000	12845.000	1109.000	12930.000
EJ	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .300 CEHV= .500
1490 NH CARD USED
*SECNO 12.357

3265 DIVIDED FLOW

12.36	9.00	1060.80	1059.93	1060.00	1061.91	1.10	.00	.00	1057.40
66414.	46834.	19580.	0.	5667.	2232.	0.	0.	0.	1066.00
.00	8.26	8.77	.00	.034	.030	.000	.000	1051.80	7172.11
.004020	600.	600.	600.	0	5	4	.00	1924.47	10079.13

FLOW DISTRIBUTION FOR SECNO= 12.36 CWSEL= 1060.80

STA=	7172.	7354.	7473.	7707.	7988.	9152.	9187.	9287.	9334.	9476.	9605.	10092.
PER Q=	4.4	3.3	12.3	3.4	4.5	3.1	15.0	7.6	11.4	5.5	29.5	
AREA=	573.5	405.2	961.0	446.1	631.4	204.9	795.5	392.7	772.0	484.4	2231.5	
VEL=	5.1	5.3	8.5	5.1	4.7	10.2	12.5	12.9	9.8	7.6	8.8	

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 12.470

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

12.47	7.82	1063.02	1063.00	.00	1065.17	2.15	2.95	.32	1065.00
66414.	7302.	59112.	0.	1410.	4788.	0.	97.	24.	1067.90
.01	5.18	12.35	.00	.040	.030	.000	.000	1055.20	7458.38
.006164	600.	600.	600.	2	15	0	.00	1506.93	10198.75

FLOW DISTRIBUTION FOR SECNO= 12.47 CWSEL= 1063.02

STA=	7458.	7676.	8351.	8486.	8510. 10205.
PER Q=	3.2	4.4	3.3	.1	89.0
AREA=	450.7	560.8	381.7	17.1	4788.3
VEL=	4.8	5.2	5.8	2.1	12.3

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


1490 NH CARD USED
*SECNO 12.584

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    12.58    11.70  1066.30  1064.50      .00  1067.41     1.11     2.13      .10  1066.20
   66414.    7083.   59331.       0.    2074.    6688.       0.     200.      46.   1068.30
      .03     3.42     8.87      .00     .045     .030     .000     .000  1054.60  7906.68
  .002313     600.     600.     600.        2       11        0      .00  1793.34 10374.84


FLOW DISTRIBUTION FOR SECNO=     12.58          CWSEL=   1066.30

STA=    7907.    8396.    8620.    9450.   10416.
  PER Q=      3.4      5.2      2.1     89.3
   AREA=    815.7    871.3    386.7   6688.5
    VEL=      2.8      3.9      3.6      8.9

1490 NH CARD USED
*SECNO 12.698

3265 DIVIDED FLOW

    12.70     9.98  1067.78  1066.52      .00  1069.02     1.24     1.57      .04  1068.40
   66414.    5056.   61358.       0.    1633.    6625.       0.     317.      72.   1074.20
      .05     3.10     9.26      .00     .045     .030     .000     .000  1057.80  7879.24
  .002991     600.     600.     600.        3       19        0      .00  1953.29 10520.86


FLOW DISTRIBUTION FOR SECNO=     12.70          CWSEL=   1067.78

STA=    7879.    8572.    8896.   10539.
  PER Q=      4.5      3.1     92.4
   AREA=    955.8    677.6   6625.0
    VEL=      3.1      3.0      9.3

1490 NH CARD USED
*SECNO 12.811
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    12.81     9.09  1069.49  1069.49      .00  1071.86     2.36     2.35      .34  1071.20
   66414.    4307.   62107.       0.    1178.    4883.       0.     416.      96.   1080.60
      .07     3.66    12.72      .00     .045     .030     .000     .000  1060.40  8412.45
  .005332     600.     600.     600.        0       11        0      .00  1566.44 10300.15


FLOW DISTRIBUTION FOR SECNO=     12.81          CWSEL=   1069.49

STA=    8412.    8781.    9090.    9240.   10351.
  PER Q=      3.2      3.2       .1     93.5
   AREA=    573.1    552.5     52.0   4883.1
    VEL=      3.8      3.8      1.2     12.7

*SECNO 13.004
3280 CROSS SECTION     13.00 EXTENDED       .98 FEET


3301 HV CHANGED MORE THAN HVINS


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1070.00 ELREA=     1081.00

    13.00    13.98  1073.98  1071.35      .00  1074.62      .64     2.59      .17  1070.00
   66414.   22994.   43420.       0.    6062.    5815.       0.     626.     137.   1081.00
      .11     3.79     7.47      .00     .040     .040     .040     .000  1060.00  8330.96
  .001484    1020.    1020.    1020.        3       15        0      .00  1939.01 10269.98


FLOW DISTRIBUTION FOR SECNO=     13.00          CWSEL=   1073.98

STA=    8331.    8471.    8660.    8860.    9030.    9210.    9337.    9443.    9568.    9744.    9793.   10299.
  PER Q=      3.7      3.5      3.4      3.5      3.1      3.5      3.9      4.9      4.1      1.1     65.4
   AREA=    634.6    682.6    691.9    647.0    622.3    561.9    580.8    715.0    730.9    195.0   5815.3
    VEL=      3.9      3.4      3.3      3.6      3.3      4.1      4.4      4.6      3.7      3.6      7.5
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   SECNO     DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q         QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME      VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE     XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 13.175
    13.18    13.45  1075.45  1073.10      .00  1076.29      .84     1.61      .06  1071.00
   66414.   17982.   48432.       0.    4191.    5896.       0.     853.     176.   1083.00
      .15     4.29     8.21      .00     .040     .040     .040     .000  1062.00  8520.98
  .002195     900.     900.     900.        3       15        0      .00  1776.69 10297.67


FLOW DISTRIBUTION FOR SECNO=     13.18          CWSEL=   1075.45

STA=    8521.    8775.    9027.    9219.    9271.    9358.    9470.    9639.    9726.   10311.
  PER Q=      3.8      3.4      3.8      3.0      3.3      3.2      3.8      2.7     72.9
   AREA=    690.6    663.6    603.2    335.3    434.1    468.8    608.4    387.1   5895.9
    VEL=      3.6      3.4      4.2      6.0      5.1      4.5      4.1      4.7      8.2

*SECNO 13.364

3265 DIVIDED FLOW

    13.36    12.67  1077.67  1074.09      .00  1078.21      .54     1.88      .03  1074.00
   66414.    9665.   56749.       0.    2299.    9278.       0.    1102.     215.   1088.00
      .20     4.20     6.12      .00     .040     .040     .040     .000  1065.00  8840.93
  .001636    1000.    1000.    1000.        2       19        0      .00  1655.18 10500.58


FLOW DISTRIBUTION FOR SECNO=     13.36          CWSEL=   1077.67

STA=    8841.    9055.    9173.    9281.    9373.   10524.
  PER Q=      3.3      4.4      4.4      2.4     85.4
   AREA=    651.7    636.9    612.2    398.5   9277.9
    VEL=      3.4      4.6      4.8      4.0      6.1

CCHV=    .300 CEHV=    .500
*SECNO 13.410

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1080.80 ELREA=     1089.90

    13.41     9.67  1078.07  1075.12      .00  1078.95      .88      .58      .17  1093.00
   66414.       0.   66414.       0.       0.    8819.       0.    1181.     227.   1093.00
      .21      .00     7.53      .00     .040     .030     .040     .000  1068.40  8965.83
  .001754     350.     340.     340.        2       11        0      .00  1274.41 10240.24
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     13.41          CWSEL=   1078.07

STA=    8966.   10450.
  PER Q=    100.0
   AREA=   8819.0
    VEL=      7.5


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     1.05      1.56      2.90       .00   1445.00    104.50  26232.00      2.00   1070.60   1070.60

*SECNO 13.420
6110 EGLWC OF 1078.73 LESS THAN XEG OF 1078.95
CLASS A LOW FLOW

3420 BRIDGE W.S.=   1077.96 BRIDGE VELOCITY=,      6.66      CALCULATED CHANNEL AREA=,     9970.

 EGPRS      EGLWC       H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC     ELTRD
                                                                  AREA
       .00   1078.73      .22        0.    66414.    26232.    26333.     1089.70   1080.80



3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1080.80 ELREA=     1089.90

    13.42     9.89  1078.29      .00      .00  1078.95      .44      .00      .00  1093.00
   66414.       0.   66414.       0.       0.   12436.       0.    1201.     229.   1093.00
      .21      .00     5.34      .00     .000     .030     .000     .000  1068.40  8965.42
  .000672      80.      80.      80.        0        0        0      .00  1462.91 10428.33


FLOW DISTRIBUTION FOR SECNO=     13.42          CWSEL=   1078.29

STA=    8965.   10450.
  PER Q=    100.0
   AREA=  12435.7
    VEL=      5.3

*SECNO 13.554
    13.55    12.18  1079.18  1074.75      .00  1079.47      .29      .47      .04  1077.00
   63865.    4593.   59272.       0.    1659.   13308.       0.    1389.     254.   1080.00
      .25     2.77     4.45      .00     .040     .040     .040     .000  1067.00  8320.96
  .000952     575.     600.     600.        2       16        0      .00  2217.61 10538.56
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     13.55         CWSEL=   1079.18

STA=    8321.    8331.    8361.    8390.    8448.    8518.    8597.    8676.    8735.    8805.   10540.
  PER Q=      .3      1.4       .8      1.1       .9       .5       .7       .7       .6     92.8
   AREA=    69.3    215.4    150.2    242.4    222.5    172.1    211.6    187.6    187.5  13308.4
    VEL=     3.0      4.3      3.4      3.0      2.5      1.9      2.2      2.5      2.2      4.5

*SECNO 13.743

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    13.74     7.84  1080.84  1080.34      .00  1082.21     1.37     2.20      .54  1081.00
   63865.    2305.   61560.       0.     493.    6463.       0.    1641.     302.   1086.00
      .28     4.67     9.52      .00     .040     .040     .040     .000  1073.00  7347.49
  .009491    1000.    1000.    1000.        3       14        0      .00  1943.06 10721.21


FLOW DISTRIBUTION FOR SECNO=     13.74         CWSEL=   1080.84

STA=    7347.    9016.    9077.   10739.
  PER Q=      3.2       .4     96.4
   AREA=    428.2     65.2   6463.4
    VEL=     4.8      4.1      9.5

*SECNO 13.932

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    13.93    10.52  1085.52  1082.65      .00  1085.95      .43     3.47      .28  1083.00
   63865.   14234.   49537.      94.    4170.    8664.      95.    1869.     363.   1085.00
      .33     3.41     5.72      .99     .040     .040     .040     .000  1075.00  6564.63
  .001780    1000.    1000.    1000.        2        5        0      .00  3328.39 10813.82


FLOW DISTRIBUTION FOR SECNO=     13.93         CWSEL=   1085.52

STA=    6565.    8331.    8587.    8811.    8980.    9377.   10619.   10814.
  PER Q=      3.3      9.6      3.7      3.1      2.5     77.6       .1
   AREA=    944.3   1307.9    701.1    529.7    686.9   8664.4     95.0
    VEL=     2.2      4.7      3.4      3.8      2.3      5.7      1.0
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


CCHV=    .100 CEHV=    .300
*SECNO 14.122

3265 DIVIDED FLOW

    14.12     7.83  1087.83  1086.45      .00  1088.34      .51     2.36      .02  1080.00
   63865.   25647.   38218.       0.    5614.    5986.       0.    2139.     441.   1091.00
      .38     4.57     6.38      .00     .040     .040     .040     .000  1080.00  6262.17
  .003549     900.    1000.    1050.        4       14        0      .00  3968.51 10705.95


FLOW DISTRIBUTION FOR SECNO=     14.12          CWSEL=   1087.83

STA=    6262.    6631.    6805.    6946.    7011.    7061.    7670.    7858.    8047.    8846.    9486.   10715.
  PER Q=      3.0      4.3      6.8      4.9      4.3      3.1      3.8      3.7      3.1      3.1     59.8
   AREA=    583.8    557.9    684.0    411.6    341.7    697.3    543.6    535.4    738.4    520.0   5986.1
    VEL=      3.3      4.9      6.4      7.6      8.0      2.8      4.5      4.4      2.6      3.9      6.4

*SECNO 14.311

3265 DIVIDED FLOW

    14.31    10.01  1091.01  1089.75      .00  1091.48      .47     3.14      .00  1090.00
   63865.   14398.   41897.    7569.    4249.    6681.    1794.    2400.     531.   1090.00
      .43     3.39     6.27     4.22     .040     .040     .040     .000  1081.00  6472.21
  .003090     800.    1000.    1200.        3        8        0      .00  4842.17 11329.48


FLOW DISTRIBUTION FOR SECNO=     14.31          CWSEL=   1091.01

STA=    6472.    6855.    7249.    7514.    8431.    8602.    9303.    9387.   10648.   10998.   11131.   11309.   11329.
  PER Q=      3.4      3.4      3.2      4.3      4.1      3.0      1.1     65.6      3.5      4.4      3.9       .1
   AREA=    637.0    639.8    585.4    935.2    566.9    694.8    189.9   6681.0    669.9    533.5    560.0     30.8
    VEL=      3.4      3.4      3.5      2.9      4.6      2.8      3.8      6.3      3.3      5.2      4.4      2.7

*SECNO 14.501

3265 DIVIDED FLOW

    14.50    10.24  1094.24  1092.73      .00  1094.83      .59     3.31      .04  1095.00
   63865.   10166.   40523.   13176.    2821.    6016.    2208.    2674.     628.   1090.00
      .48     3.60     6.74     5.97     .040     .040     .040     .000  1084.00  7340.14
  .003462     900.    1000.    1200.        1       15        0      .00  3864.33 11305.54
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     14.50         CWSEL=   1094.24

STA=    7340.    7678.    8572.    8682.    9144.    9434.   10585.   10680.   10756.   10824.   10893.   11034.   11306.
 PER Q=     3.2      3.4      4.1      3.1      2.1     63.5      4.9      4.1      3.7      3.7      3.6       .7
  AREA=   598.9    809.8    455.5    583.8    373.0   6016.0    484.0    397.6    355.8    361.0    428.1    181.7
   VEL=     3.5      2.7      5.7      3.4      3.6      6.7      6.5      6.6      6.6      6.6      5.3      2.4

*SECNO 14.690

3265 DIVIDED FLOW

   14.69     9.46  1097.46  1095.93      .00  1098.05      .59     3.21      .00  1097.00
  62049.   11077.   41953.    9019.    2601.    6122.    2073.    2922.     705.   1094.00
     .52     4.26     6.85     4.35     .040     .040     .040     .000  1088.00  8257.56
 .003027     960.    1000.    1000.        0       16        0      .00  2926.50 11383.26


FLOW DISTRIBUTION FOR SECNO=     14.69         CWSEL=   1097.46

STA=    8258.    8786.    8929.    9000.    9084.    9430.    9548.   10545.   10693.   10844.   10979.   11207.   11383.
 PER Q=     3.3      4.0      3.6      3.4      3.0       .6     67.6      3.9      4.0      3.5      3.0       .1
  AREA=   591.3    518.7    364.9    375.5    605.2    145.5   6121.7    513.6    524.0    468.5    492.7     74.6
   VEL=     3.4      4.8      6.1      5.5      3.1      2.4      6.9      4.7      4.7      4.7      3.8      1.2

*SECNO 14.879
3280 CROSS SECTION     14.88 EXTENDED      2.99 FEET

   14.88    10.99  1099.99  1097.94      .00  1100.34      .34     2.26      .02  1118.00
  62049.       0.   42202.   19847.       0.    8275.    5443.    3198.     772.   1098.00
     .58      .00     5.10     3.65     .040     .040     .040     .000  1089.00  9051.04
 .001807     950.    1000.     950.        2       10        0      .00  3049.96 12101.00


FLOW DISTRIBUTION FOR SECNO=     14.88         CWSEL=   1099.99

STA=    9051.   10475.   10723.   10930.   11140.   11386.   11495.   11565.   11715.   11931.   12101.
 PER Q=    68.0      4.8      3.5      3.3      3.9      3.8      3.5      3.1      3.4      2.6
  AREA=  8275.5    824.4    649.0    627.0    734.5    512.9    419.0    523.8    644.9    507.6
   VEL=     5.1      3.6      3.4      3.3      3.3      4.6      5.2      3.7      3.3      3.2

*SECNO 15.069
3280 CROSS SECTION     15.07 EXTENDED      3.46 FEET
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


    15.07    13.46  1101.46  1097.96      .00  1101.74      .28     1.40      .01  1127.00
   62049.       0.   52330.    9719.       0.   11725.    3090.    3525.     836.   1099.00
      .65      .00     4.46     3.15     .040     .040     .040     .000  1088.00  9088.04
  .001115    1000.    1000.    1000.        3       10        0      .00  2544.96 11633.00


FLOW DISTRIBUTION FOR SECNO=     15.07          CWSEL=   1101.46

STA=    9088.   10802.   11152.   11318.   11410.   11572.   11633.
  PER Q=     84.3      3.3      4.0      3.6      3.8       .9
   AREA=  11724.8    880.3    742.0    547.9    708.7    210.8
    VEL=      4.5      2.3      3.4      4.1      3.3      2.7

*SECNO 15.258

3301 HV CHANGED MORE THAN HVINS

    15.26     9.11  1103.11  1101.66      .00  1104.01      .90     2.09      .19  1131.00
   62049.       0.   62033.      16.       0.    8126.      24.    3780.     885.   1103.00
      .68      .00     7.63      .64     .040     .040     .040     .000  1094.00  9412.00
  .005573    1050.    1000.     750.        2       11        0      .00  1994.02 11406.02


FLOW DISTRIBUTION FOR SECNO=     15.26          CWSEL=   1103.11

STA=    9412.   11188.   11285.   11399.   11406.
  PER Q=    100.0       .0       .0       .0
   AREA=   8125.9     11.0     12.9       .4
    VEL=      7.6       .6       .6       .4

*SECNO 15.454

3265 DIVIDED FLOW

    15.45    14.18  1107.18  1104.18      .00  1107.64      .46     3.58      .04  1127.00
   62049.       0.   60998.    1051.       0.   11156.     548.    4015.     939.   1106.00
      .74      .00     5.47     1.92     .040     .040     .040     .000  1093.00  9377.74
  .002363    1060.    1035.     840.        3       11        0      .00  2723.12 12185.82


FLOW DISTRIBUTION FOR SECNO=     15.45          CWSEL=   1107.18

STA=    9378.   11491.   12186.
  PER Q=     98.3      1.7
   AREA=  11156.4    547.8
    VEL=      5.5      1.9
```

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

*SECNO 15.647

3265 DIVIDED FLOW

3280 CROSS SECTION 15.65 EXTENDED .72 FEET

15.65	12.72	1109.72	1107.77	.00	1110.08	.36	2.43	.01	1132.00
60605.	0.	49633.	10972.	0.	9741.	3258.	4295.	1008.	1107.00
.79	.00	5.10	3.37	.040	.040	.040	.000	1097.00	9344.18
.002508	1060.	1020.	810.	3	13	0	.00	3566.77	12930.00

FLOW DISTRIBUTION FOR SECNO= 15.65 CWSEL= 1109.72

STA=	9344.	11506.	11712.	11941.	12151.	12391.	12785.	12930.
PER Q=	81.9	3.4	3.7	3.4	3.9	3.3	.4
AREA=	9740.8	560.3	622.9	571.2	652.8	716.7	134.4
VEL=	5.1	3.6	3.6	3.6	3.6	2.8	1.8

THIS RUN EXECUTED 09-08-87

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
  IBM-PC-XT VERSION AUGUST 1985
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T1 FLOODWAY RUN WITH NEW WADDELL DAM IN PLACE
T2 NORTHERN AVENUE TO CACTUS ROAD USING 1984 COE HEC-2 MODEL WITH NEW Q100
T3 AGUA FRIA RIVER WITH OLIVE AVENUE BRIDGE IN PLACE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	.000000	.00	.0	0.	1061.750	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	.000	-1.000	.000	.000	.000	-1.000	.000	.000	15.000

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


*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .300 CEHV=    .500
1490 NH CARD USED
*SECNO 12.357
 2800 NAT Q1=  10474.77  WSEL=   1060.80  ENC Q1=  10474.77  WSEL=   1061.80  RATIO=   .0000
 NAT Q1=  14292.  RATIOS LOB,CH,ROB=   .7030   .2970   .0000  WSEL=   1061.80

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    8193.5   10092.0  TYPE=     4  TARGET=        .267
    12.36     9.95  1061.75  1060.88  1060.80  1063.53     1.78      .00      .00  1057.40
   66414.   39533.   26881.       0.    3541.    2681.       0.       0.       0.   1066.00
      .00    11.16    10.03      .00     .030     .030     .000     .000  1051.80  8193.47
  .004140     600.     600.     600.        0       14        0      .00  1085.98 10081.47


FLOW DISTRIBUTION FOR SECNO=     12.36          CWSEL=   1061.75

STA=    8193.    9152.    9187.    9287.    9334.    9354.    9476.    9605.   10092.
  PER Q=      4.6      4.1     18.3      9.3      3.1     11.9      8.2     40.5
   AREA=    463.7    238.0    890.0    437.1    162.0    744.2    606.3   2680.8
    VEL=      6.6     11.4     13.7     14.1     12.8     10.6      8.9     10.0

CCHV=    .100 CEHV=    .300
1490 NH CARD USED
*SECNO 12.470

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9440.0   10200.0  TYPE=     1  TARGET=     760.000
    12.47     8.81  1064.01  1063.34  1063.02  1066.56     2.55     2.80      .23100000.00
   66414.       0.   66414.       0.       0.    5182.       0.      79.      13. 100000.00
      .01      .00    12.82      .00     .030     .030     .000     .000  1055.20  9440.00
  .005285     600.     600.     600.        2       15        0      .00   760.00 10200.00


FLOW DISTRIBUTION FOR SECNO=     12.47          CWSEL=   1064.01

STA=    9440.   10205.
  PER Q=    100.0
   AREA=   5182.3
    VEL=     12.8
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 12.584
 2800 NAT Q1=  13810.71  WSEL=   1066.30  ENC Q1=  14985.49  WSEL=   1067.20  RATIO=  -.0851
 NAT Q1=  17293.  RATIOS LOB,CH,ROB=   .1334   .8666   .0000  WSEL=   1067.20

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9450.0   10416.0  TYPE=     4  TARGET=        .133
    12.58    12.69  1067.29  1064.45  1066.30  1068.48     1.18     1.78      .14  1066.20
   66414.       0.   66414.       0.       0.    7605.       0.     167.      24.   1068.30
      .03      .00     8.73      .00     .045     .030     .000     .000  1054.60  9450.00
  .001896     600.     600.     600.        2        8        0      .00   926.41 10376.41


FLOW DISTRIBUTION FOR SECNO=     12.58          CWSEL=   1067.29

STA=    9450.   10416.
  PER Q=    100.0
   AREA=   7605.0
    VEL=      8.7

1490 NH CARD USED
*SECNO 12.698
 2800 NAT Q1=  12144.57  WSEL=   1067.78  ENC Q1=  14235.68  WSEL=   1068.78  RATIO=  -.1722
 NAT Q1=  16046.  RATIOS LOB,CH,ROB=   .1128   .8872   .0000  WSEL=   1068.78

3470 ENCROACHMENT STATIONS=    9467.0   10539.0  TYPE=     4  TARGET=        .113
    12.70    10.73  1068.54  1066.34  1067.78  1069.78     1.24     1.29      .02  1068.40
   66414.       0.   66414.       0.       0.    7417.       0.     270.      38.   1074.20
      .05      .00     8.95      .00     .045     .030     .000     .000  1057.80  9467.00
  .002439     600.     600.     600.        2       19        0      .00  1055.99 10522.99


FLOW DISTRIBUTION FOR SECNO=     12.70          CWSEL=   1068.54

STA=    9467.   10539.
  PER Q=    100.0
   AREA=   7417.2
    VEL=      9.0

1490 NH CARD USED
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 12.811
 2800 NAT Q1=   9094.96  WSEL=   1069.49  ENC Q1=  10686.11  WSEL=   1070.49  RATIO=  -.1749
 NAT Q1=  11989.  RATIOS LOB,CH,ROB=   .1087   .8913   .0000  WSEL=   1070.49

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9551.0   10351.0  TYPE=     4  TARGET=        .109
    12.81     9.21  1069.61  1069.14  1069.49  1072.38     2.77     2.15      .46  1071.20
   66414.       0.   66414.       0.       0.    4973.       0.     355.      50.   1080.60
      .06      .00    13.36      .00     .045     .030     .000     .000  1060.40  9560.51
  .005750     600.     600.     600.        3       15        0      .00   739.94 10300.45


FLOW DISTRIBUTION FOR SECNO=     12.81          CWSEL=   1069.61

STA=    9561.   10351.
  PER Q=    100.0
   AREA=   4972.7
    VEL=     13.4

*SECNO 13.004
3280 CROSS SECTION     13.00 EXTENDED      1.59 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9108.0   10299.0  TYPE=     1  TARGET=    1191.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1070.00 ELREA=   100000.00

    13.00    14.60  1074.60  1070.92  1073.98  1075.47      .87     2.89      .19  1070.00
   66414.   16359.   50055.       0.    3521.    6109.       0.     526.      73. 100000.00
      .10     4.65     8.19      .00     .040     .040     .040     .000  1060.00  9108.00
  .001685    1020.    1020.    1020.        2       12        0      .00  1164.46 10272.46


FLOW DISTRIBUTION FOR SECNO=     13.00          CWSEL=   1074.60

STA=    9108.    9273.    9337.    9443.    9503.    9568.    9687.    9793.   10299.
  PER Q=      3.3      3.3      4.9      3.2      3.0      3.8      3.1     75.4
   AREA=    605.4    413.5    645.9    395.6    396.1    577.1    486.9   6108.8
    VEL=      3.6      5.3      5.1      5.4      5.1      4.4      4.2      8.2
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 13.175
 2800 NAT Q1=  14177.04  WSEL=   1075.45  ENC Q1=  14177.04  WSEL=   1076.45  RATIO=   .0000
 NAT Q1=  17724.  RATIOS LOB,CH,ROB=   .3208   .6792   .0000  WSEL=   1076.45

3470 ENCROACHMENT STATIONS=    9331.3   10311.0  TYPE=     4  TARGET=        .200
    13.18    14.21  1076.21  1073.06  1075.45  1077.34     1.13     1.79      .08  1071.00
   66414.    9645.   56769.       0.    1884.    6332.       0.     711.      95.   1083.00
      .13     5.12     8.97      .00     .040     .040     .040     .000  1062.00  9331.31
  .002385     900.     900.     900.        2       19        0      .00   967.71 10299.02


FLOW DISTRIBUTION FOR SECNO=     13.18          CWSEL=   1076.21

STA=    9331.    9358.    9411.    9470.    9525.    9588.    9639.    9679.    9726.   10311.
  PER Q=      1.0      2.3      2.1      1.6      1.9      1.8      1.7      2.0     85.5
   AREA=    139.1    276.2    277.9    231.6    265.3    240.3    208.4    244.9   6332.1
    VEL=      4.8      5.5      5.1      4.7      4.7      5.1      5.5      5.5      9.0

*SECNO 13.364
 2800 NAT Q1=  16421.34  WSEL=   1077.67  ENC Q1=  16968.93  WSEL=   1078.67  RATIO=  -.0333
 NAT Q1=  20285.  RATIOS LOB,CH,ROB=   .1635   .8365   .0000  WSEL=   1078.67

3470 ENCROACHMENT STATIONS=    9373.0   10524.0  TYPE=     4  TARGET=        .163
    13.36    13.65  1078.65  1073.97  1077.67  1079.29      .64     1.90      .05  1074.00
   66414.       0.   66414.       0.       0.   10385.       0.     924.     119.   1088.00
      .18      .00     6.40      .00     .040     .040     .040     .000  1065.00  9373.00
  .001552    1000.    1000.    1000.        2       14        0      .00  1129.80 10502.80


FLOW DISTRIBUTION FOR SECNO=     13.36          CWSEL=   1078.65

STA=    9373.   10524.
  PER Q=    100.0
   AREA=  10384.5
    VEL=      6.4

CCHV=    .300 CEHV=    .500
*SECNO 13.410

3470 ENCROACHMENT STATIONS=    9100.0   10250.0  TYPE=     1  TARGET=    1150.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1080.80 ELREA=     1089.90
```

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


    13.41     10.65  1079.05   1075.09   1078.07   1079.79       .74       .45       .05100000.00
   66414.        0.   66414.        0.        0.    9617.        0.     1002.      128. 100000.00
      .19       .00      6.91       .00      .040      .030      .040      .000   1068.40  9100.00
  .001152      350.      340.      340.         2        11         0       .00   1150.00 10250.00


FLOW DISTRIBUTION FOR SECNO=     13.41          CWSEL=   1079.05

STA=    9100.   10450.
  PER Q=    100.0
   AREA=   9617.2
    VEL=      6.9


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     1.05      1.56      2.90       .00   1445.00    104.50  26232.00      2.00   1070.60   1070.60

*SECNO 13.420
     3700.   BRIDGE STENCL=   9100.00    STENCR=  10250.00
6110 EGLWC OF 1079.56 LESS THAN XEG OF 1079.79
CLASS A LOW FLOW

3420 BRIDGE W.S.=   1078.97 BRIDGE VELOCITY=,      5.85      CALCULATED CHANNEL AREA=,    11356.

 EGPRS     EGLWC       H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC     ELTRD
                                                                 AREA
       .00   1079.56       .15        0.    66414.    26232.    26333.     1089.70   1080.80



3470 ENCROACHMENT STATIONS=    9100.0   10250.0  TYPE=     4  TARGET=        .000
 ELENCL=       .00  ELENCR=       .00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1080.80 ELREA=     1089.90

    13.42     10.80  1079.20       .00  1078.29  1079.79       .36       .00       .00  1093.00
   66414.        0.   66414.        0.        0.   13767.        0.     1024.      130.   1093.00
      .19       .00      4.82       .00      .000      .030      .000      .000   1068.40  8963.74
 .000480       80.       80.       80.         0         0         0       .00   1466.38 10430.12


FLOW DISTRIBUTION FOR SECNO=     13.42          CWSEL=   1079.20

STA=    8964.   10450.
  PER Q=    100.0
   AREA=  13767.1
    VEL=      4.8
```

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


*SECNO 13.554

3470 ENCROACHMENT STATIONS=    9000.0   10540.0  TYPE=     1  TARGET=    1540.000
    13.55    12.83  1079.83  1074.81  1079.18  1080.18      .35      .39      .00100000.00
   63865.       0.   63865.       0.       0.   13399.       0.    1211.     151. 100000.00
      .23      .00     4.77      .00     .040     .040     .040     .000  1067.00  9000.00
  .000929     575.     600.     600.        2       19        0      .00  1539.70 10539.70


FLOW DISTRIBUTION FOR SECNO=     13.55          CWSEL=   1079.83

STA=    9000.   10540.
  PER Q=    100.0
   AREA=  13398.6
    VEL=      4.8

*SECNO 13.743
 2800 NAT Q1=   6555.60  WSEL=   1080.84  ENC Q1=   8957.66  WSEL=   1081.84  RATIO=  -.3664
 NAT Q1=   9659.  RATIOS LOB,CH,ROB=   .0726   .9274   .0000  WSEL=   1081.84

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9209.0   10739.0  TYPE=     4  TARGET=        .073
    13.74     8.39  1081.39  1080.37  1080.84  1082.58     1.19     1.98      .42  1081.00
   63865.       0.   63865.       0.       0.    7308.       0.    1449.     186.   1086.00
      .26      .00     8.74      .00     .040     .040     .040     .000  1073.00  9209.00
  .006801    1000.    1000.    1000.        3       11        0      .00  1514.14 10723.14


FLOW DISTRIBUTION FOR SECNO=     13.74          CWSEL=   1081.39

STA=    9209.   10739.
  PER Q=    100.0
   AREA=   7308.2
    VEL=      8.7

*SECNO 13.932
 2800 NAT Q1=  15136.02  WSEL=   1085.52  ENC Q1=  15136.02  WSEL=   1086.52  RATIO=   .0000
 NAT Q1=  20462.  RATIOS LOB,CH,ROB=   .2762   .7167   .0071  WSEL=   1086.52

3470 ENCROACHMENT STATIONS=    9164.2   10619.0  TYPE=     4  TARGET=        .260
    13.93    10.83  1085.83  1082.81  1085.52  1086.55      .73     3.83      .14  1083.00
   63865.    1486.   62379.       0.     470.    9036.       0.    1642.     220.   1085.00
      .30     3.16     6.90      .00     .040     .040     .040     .000  1075.00  9164.20
  .002456    1000.    1000.    1000.        2       11        0      .00  1454.80 10619.00
```

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


FLOW DISTRIBUTION FOR SECNO=     13.93          CWSEL=   1085.83

STA=    9164.    9171.    9260.    9331.    9377.   10619.
  PER Q=       .0       .7       .8       .7     97.7
   AREA=     12.4    162.3    165.0    129.9   9036.0
    VEL=      2.3      2.7      3.2      3.7      6.9

CCHV=    .100 CEHV=    .300
*SECNO 14.122

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    7950.0   10708.0  TYPE=     1  TARGET=    2758.000
    14.12     8.78  1088.78  1087.35  1087.83  1089.52      .74     2.96      .00  1080.00
   63865.   11315.   52550.       0.    2731.    7146.       0.    1860.     264. 100000.00
      .34     4.14     7.35      .00     .040     .040     .040     .000  1080.00  7950.00
  .003727     900.    1000.    1050.        3       19        0      .00  2527.81 10708.00


FLOW DISTRIBUTION FOR SECNO=     14.12          CWSEL=   1088.78

STA=    7950.    8047.    8491.    8786.    8953.    9486.   10715.
  PER Q=      3.1      3.6      3.7      4.3      3.0     82.3
   AREA=    367.0    698.2    618.5    548.3    499.4   7146.5
    VEL=      5.4      3.3      3.8      5.1      3.8      7.4

*SECNO 14.311

3470 ENCROACHMENT STATIONS=    8350.0   10648.0  TYPE=     1  TARGET=    2298.000
    14.31    10.99  1091.99  1089.91  1091.01  1092.59      .60     3.06      .01  1090.00
   63865.   11577.   52288.       0.    2756.    7916.       0.    2084.     314. 100000.00
      .38     4.20     6.61      .00     .040     .040     .040     .000  1081.00  8350.00
  .002740     800.    1000.    1200.        2        5        0      .00  2298.00 10648.00


FLOW DISTRIBUTION FOR SECNO=     14.31          CWSEL=   1091.99

STA=    8350.    8431.    8558.    8919.    9303.    9387.   10648.
  PER Q=      3.1      4.3      5.0      3.9      1.9     81.9
   AREA=    368.0    536.8    860.0    718.8    272.2   7915.7
    VEL=      5.4      5.1      3.7      3.4      4.4      6.6
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 14.501
 2800 NAT Q1=  10854.81  WSEL=   1094.24  ENC Q1=  10854.81  WSEL=   1095.14  RATIO=   .0000
 NAT Q1=  15404.  RATIOS LOB,CH,ROB=   .2195   .5777   .2027  WSEL=   1095.14

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    8683.5   10701.9  TYPE=     4  TARGET=        .295
    14.50    11.00  1095.00  1093.37  1094.24  1095.84      .84     3.18      .07  1095.00
   63865.    6172.   52711.    4982.    1518.    6870.     688.    2307.     362.   1090.00
      .42     4.07     7.67     7.24     .040     .040     .040     .000  1084.00  8683.46
  .003780     900.    1000.    1200.        2       14        0      .00  2018.33 10701.91


FLOW DISTRIBUTION FOR SECNO=     14.50          CWSEL=   1095.00

STA=    8683.    8891.    9183.    9470.   10585.   10680.   10702.
  PER Q=      3.1      3.9      2.6     82.5      6.5      1.3
   AREA=    485.1    579.2    453.2   6869.9    556.9    131.5
    VEL=      4.1      4.3      3.7      7.7      7.4      6.4

*SECNO 14.690
 2800 NAT Q1=  11277.61  WSEL=   1097.46  ENC Q1=  11277.61  WSEL=   1098.36  RATIO=   .0000
 NAT Q1=  15333.  RATIOS LOB,CH,ROB=   .2090   .6233   .1678  WSEL=   1098.36

3470 ENCROACHMENT STATIONS=    9017.2   10673.9  TYPE=     4  TARGET=        .264
    14.69    10.40  1098.40  1096.31  1097.46  1099.18      .78     3.33      .01  1097.00
   62049.    6539.   52496.    3014.    1528.    7047.     567.    2515.     403.   1094.00
      .46     4.28     7.45     5.32     .040     .040     .040     .000  1088.00  9017.23
  .002965     960.    1000.    1000.        3       16        0      .00  1656.69 10673.93


FLOW DISTRIBUTION FOR SECNO=     14.69          CWSEL=   1098.40

STA=    9017.    9084.    9132.    9181.    9248.    9306.    9372.    9430.    9492.    9548.   10545.   10622.   10674.
  PER Q=      3.2      1.5       .9       .9       .8       .9       .8       .9       .5     84.6      3.0      1.9
   AREA=    346.7    187.1    142.0    160.7    139.1    158.3    139.1    148.7    106.3   7046.8    338.6    228.4
    VEL=      5.7      5.0      4.1      3.6      3.6      3.6      3.6      3.6      3.1      7.4      5.4      5.1

*SECNO 14.879
 2800 NAT Q1=  14595.31  WSEL=   1099.99  ENC Q1=  14595.31  WSEL=   1100.89  RATIO=   .0000
 NAT Q1=  19516.  RATIOS LOB,CH,ROB=   .0000   .6474   .3526  WSEL=   1100.89
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3280 CROSS SECTION     14.88 EXTENDED      3.97 FEET


3470 ENCROACHMENT STATIONS=    9006.0   10970.8  TYPE=     4  TARGET=        .252
    14.88    11.98  1100.98  1098.03  1099.99  1101.42      .45     2.21      .03  1118.00
   62049.       0.   53629.    8420.       0.    9679.    2084.    2752.     444.   1098.00
      .51      .00     5.54     4.04     .040     .040     .040     .000  1089.00  9048.57
  .001735     950.    1000.     950.        2       12        0      .00  1922.27 10970.84


FLOW DISTRIBUTION FOR SECNO=     14.88          CWSEL=   1100.98

STA=    9049.   10475.   10556.   10641.   10723.   10785.   10857.   10930.   10971.
  PER Q=     86.4      1.6      2.6      3.0      1.9      1.8      1.8      1.0
   AREA=   9679.3    281.1    380.0    407.6    277.2    285.9    289.9    162.2
    VEL=      5.5      3.5      4.2      4.5      4.2      3.9      3.9      3.6

*SECNO 15.069
 2800 NAT Q1=  18579.17  WSEL=   1101.46  ENC Q1=  19215.98  WSEL=   1102.36  RATIO=  -.0343
 NAT Q1=  23308.  RATIOS LOB,CH,ROB=   .0000   .8244   .1756  WSEL=   1102.36
3280 CROSS SECTION     15.07 EXTENDED      4.41 FEET


3470 ENCROACHMENT STATIONS=    9026.0   10802.0  TYPE=     4  TARGET=        .176
    15.07    14.41  1102.41  1097.97  1101.46  1102.74      .33     1.31      .01  1127.00
   62049.       0.   62049.       0.       0.   13362.       0.    3041.     485.   1099.00
      .57      .00     4.64      .00     .040     .040     .040     .000  1088.00  9081.84
  .001022    1000.    1000.    1000.        2       10        0      .00  1720.16 10802.00


FLOW DISTRIBUTION FOR SECNO=     15.07          CWSEL=   1102.41

STA=    9082.   10802.
  PER Q=    100.0
   AREA=  13362.0
    VEL=      4.6

*SECNO 15.258
 2800 NAT Q1=   8311.76  WSEL=   1103.11  ENC Q1=  11531.19  WSEL=   1104.11  RATIO=  -.3873
 NAT Q1=  11646.  RATIOS LOB,CH,ROB=   .0000   .9902   .0098  WSEL=   1104.11

3470 ENCROACHMENT STATIONS=    9361.0   11188.0  TYPE=     4  TARGET=        .010
    15.26     9.87  1103.87  1101.64  1103.11  1104.54      .67     1.70      .10  1131.00
   62049.       0.   62049.       0.       0.    9476.       0.    3303.     526.   1103.00
      .62      .00     6.55      .00     .040     .040     .040     .000  1094.00  9410.63
  .003346    1050.    1000.     750.        2       11        0      .00  1777.37 11188.00
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=     15.26          CWSEL=   1103.87

STA=    9411.   11188.
 PER Q=    100.0
  AREA=   9475.9
   VEL=      6.5

*SECNO 15.454
 2800 NAT Q1=  12764.55  WSEL=   1107.18  ENC Q1=  16750.76  WSEL=   1108.18  RATIO=  -.3123
 NAT Q1=  17458.  RATIOS LOB,CH,ROB=   .0000   .9595   .0405  WSEL=   1108.18

3470 ENCROACHMENT STATIONS=    9350.0   11491.0  TYPE=     4  TARGET=        .041
    15.45    14.09  1107.09  1104.29  1107.18  1107.59      .50     3.04      .02  1127.00
   62049.       0.   62049.       0.       0.   10963.       0.    3546.     572.   1106.00
      .67      .00     5.66      .00     .040     .040     .040     .000  1093.00  9377.87
  .002593    1060.    1035.     840.        1       12        0      .00  2113.13 11491.00


FLOW DISTRIBUTION FOR SECNO=     15.45          CWSEL=   1107.09

STA=    9378.   11491.
  PER Q=    100.0
   AREA=  10963.0
    VEL=      5.7

*SECNO 15.647
 2800 NAT Q1=  12102.63  WSEL=   1109.72  ENC Q1=  13748.36  WSEL=   1110.72  RATIO=  -.1360
 NAT Q1=  17671.  RATIOS LOB,CH,ROB=   .0000   .7780   .2220  WSEL=   1110.72

3265 DIVIDED FLOW

3280 CROSS SECTION     15.65 EXTENDED       .98 FEET


3470 ENCROACHMENT STATIONS=    9312.0   11506.0  TYPE=     4  TARGET=        .222
    15.65    12.97  1109.97  1107.13  1109.72  1110.51      .54     2.90      .01  1132.00
   60605.       0.   60605.       0.       0.   10299.       0.    3795.     622.   1107.00
      .71      .00     5.88      .00     .040     .040     .040     .000  1097.00  9343.81
  .003145    1060.    1020.     810.        2       17        0      .00  2160.80 11506.00


FLOW DISTRIBUTION FOR SECNO=     15.65          CWSEL=   1109.97

STA=    9344.   11506.
  PER Q=    100.0
   AREA=  10299.2
    VEL=      5.9
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THIS RUN EXECUTED 09-08-87

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
  IBM-PC-XT VERSION AUGUST 1985
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

AGUA FRIA RIVER

SUMMARY PRINTOUT

	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	CWSEL	DIFWSP
	12.357	66414.00	7172.11	9605.00	8.26	8.77	.00	10092.00	10079.13	1924.47	1060.80	.00
	12.357	66414.00	8193.47	9605.00	11.16	10.03	.00	10092.00	10081.47	1085.98	1061.75	.95
	12.470	66414.00	7458.38	9340.00	5.18	12.35	.00	10205.00	10198.75	1506.93	1063.02	.00
	12.470	66414.00	9440.00	9340.00	.00	12.82	.00	10205.00	10200.00	760.00	1064.01	.99
	12.584	66414.00	7906.68	9450.00	3.42	8.87	.00	10416.00	10374.84	1793.34	1066.30	.00
	12.584	66414.00	9450.00	9450.00	.00	8.73	.00	10416.00	10376.41	926.41	1067.29	.99
	12.698	66414.00	7879.24	9467.00	3.10	9.26	.00	10539.00	10520.86	1953.29	1067.78	.00
	12.698	66414.00	9467.00	9467.00	.00	8.95	.00	10539.00	10522.99	1055.99	1068.54	.75
*	12.811	66414.00	8412.45	9551.00	3.66	12.72	.00	10351.00	10300.15	1566.44	1069.49	.00
	12.811	66414.00	9560.51	9551.00	.00	13.36	.00	10351.00	10300.45	739.94	1069.61	.12
	13.004	66414.00	8330.96	9793.00	3.79	7.47	.00	10299.00	10269.98	1939.01	1073.98	.00
	13.004	66414.00	9108.00	9793.00	4.65	8.19	.00	10299.00	10272.46	1164.46	1074.60	.62
	13.175	66414.00	8520.98	9726.00	4.29	8.21	.00	10311.00	10297.67	1776.69	1075.45	.00
	13.175	66414.00	9331.31	9726.00	5.12	8.97	.00	10311.00	10299.02	967.71	1076.21	.76
	13.364	66414.00	8840.93	9373.00	4.20	6.12	.00	10524.00	10500.58	1655.18	1077.67	.00
	13.364	66414.00	9373.00	9373.00	.00	6.40	.00	10524.00	10502.80	1129.80	1078.65	.98
	13.410	66414.00	8965.83	8947.00	.00	7.53	.00	10450.00	10240.24	1274.41	1078.07	.00
	13.410	66414.00	9100.00	8947.00	.00	6.91	.00	10450.00	10250.00	1150.00	1079.05	.98
	13.420	66414.00	8965.42	8947.00	.00	5.34	.00	10450.00	10428.33	1462.91	1078.29	.00
	13.420	66414.00	8963.74	8947.00	.00	4.82	.00	10450.00	10430.12	1466.38	1079.20	.91
	13.554	63865.00	8320.96	8805.00	2.77	4.45	.00	10540.00	10538.56	2217.61	1079.18	.00
	13.554	63865.00	9000.00	8805.00	.00	4.77	.00	10540.00	10539.70	1539.70	1079.83	.65

SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	CWSEL	DIFWSP
13.743	63865.00	7347.49	9209.00	4.67	9.52	.00	10739.00	10721.21	1943.06	1080.84	.00
13.743	63865.00	9209.00	9209.00	.00	8.74	.00	10739.00	10723.14	1514.14	1081.39	.56
13.932	63865.00	6564.63	9377.00	3.41	5.72	.99	10619.00	10813.82	3328.39	1085.52	.00
13.932	63865.00	9164.20	9377.00	3.16	6.90	.00	10619.00	10619.00	1454.80	1085.83	.30
14.122	63865.00	6262.17	9486.00	4.57	6.38	.00	10715.00	10705.95	3968.51	1087.83	.00
14.122	63865.00	7950.00	9486.00	4.14	7.35	.00	10715.00	10708.00	2527.81	1088.78	.95
14.311	63865.00	6472.21	9387.00	3.39	6.27	4.22	10648.00	11329.48	4842.17	1091.01	.00
14.311	63865.00	8350.00	9387.00	4.20	6.61	.00	10648.00	10648.00	2298.00	1091.99	.98
14.501	63865.00	7340.14	9470.00	3.60	6.74	5.97	10585.00	11305.54	3864.33	1094.24	.00
14.501	63865.00	8683.46	9470.00	4.07	7.67	7.24	10585.00	10701.91	2018.33	1095.00	.76
14.690	62049.00	8257.56	9548.00	4.26	6.85	4.35	10545.00	11383.26	2926.50	1097.46	.00
14.690	62049.00	9017.23	9548.00	4.28	7.45	5.32	10545.00	10673.93	1656.69	1098.40	.94
14.879	62049.00	9051.04	9006.00	.00	5.10	3.65	10475.00	12101.00	3049.96	1099.99	.00
14.879	62049.00	9048.57	9006.00	.00	5.54	4.04	10475.00	10970.84	1922.27	1100.98	.98
15.069	62049.00	9088.04	9026.00	.00	4.46	3.15	10802.00	11633.00	2544.96	1101.46	.00
15.069	62049.00	9081.84	9026.00	.00	4.64	.00	10802.00	10802.00	1720.16	1102.41	.95
15.258	62049.00	9412.00	9361.00	.00	7.63	.64	11188.00	11406.02	1994.02	1103.11	.00
15.258	62049.00	9410.63	9361.00	.00	6.55	.00	11188.00	11188.00	1777.37	1103.87	.76
15.454	62049.00	9377.74	9350.00	.00	5.47	1.92	11491.00	12185.82	2723.12	1107.18	.00
15.454	62049.00	9377.87	9350.00	.00	5.66	.00	11491.00	11491.00	2113.13	1107.09	-.09
15.647	60605.00	9344.18	9312.00	.00	5.10	3.37	11506.00	12930.00	3566.77	1109.72	.00
15.647	60605.00	9343.81	9312.00	.00	5.88	.00	11506.00	11506.00	2160.80	1109.97	.25

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION  SECNO=    12.811  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    12.811  PROFILE= 1  MINIMUM SPECIFIC ENERGY
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FLOODWAY DATA, AGUA FRIA RIVER
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
12.357	1888.	6222.	10.7	1061.7	1060.8	.9
12.470	760.	5182.	12.8	1064.0	1063.0	1.0
12.584	926.	7605.	8.7	1067.3	1066.3	1.0
12.698	1056.	7417.	9.0	1068.6	1067.8	.8
12.811	740.	4973.	13.4	1069.6	1069.5	.1
13.004	1164.	9629.	6.9	1074.6	1074.0	.6
13.175	968.	8216.	8.1	1076.2	1075.4	.8
13.364	1130.	10385.	6.4	1078.7	1077.7	1.0
13.410	1150.	9617.	6.9	1079.1	1078.1	1.0
13.420	1466.	13767.	4.8	1079.2	1078.3	.9
13.554	1540.	13399.	4.8	1079.9	1079.2	.7
13.743	1514.	7308.	8.7	1081.4	1080.8	.6
13.932	1455.	9506.	6.7	1085.8	1085.5	.3
14.122	2758.	9878.	6.5	1088.7	1087.8	.9
14.311	2298.	10671.	6.0	1092.0	1091.0	1.0
14.501	2018.	9076.	7.0	1095.0	1094.2	.8
14.690	1657.	9142.	6.8	1098.4	1097.5	.9
14.879	1922.	11763.	5.3	1101.0	1100.0	1.0
15.069	1720.	13362.	4.6	1102.5	1101.5	1.0
15.258	1777.	9476.	6.5	1103.9	1103.1	.8
15.454	2113.	10963.	5.7	1107.2	1107.2	.0
15.647	2162.	10299.	5.9	1110.0	1109.7	.3

APPENDIX C

HEC-2 Cross-Section Plots
For Corps Of Engineers' Calibration Run
(with existing Waddell Dam)

CROSS SECTION 12.36
STREAM AGUA FRIA RIVER
DISCHARGE= 95800.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1050.    1054.    1058.    1062.    1066.    1070.    1074.    1078.    1082.    1086.    1090.


   STA-FEET

 23900. .       .        .        .        .        .        .        .        .        .   X    .        .
 34000. .       .        .        .        .        .        .   X    .        .        .        .        .
 44100. .       .        .        .        .        .        .   X    .        .        .        .        .
 64200. .       .        .        .  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  .        .        .        .        .
 74300. .       .        .       X.      WE .        .        .        .        .        .        .        .
 84400. .       .        .     X C .      WE .        .        .        .        .        .        .        .
  4500. .       .        .     X C .      WE .        .        .        .        .        .        .        .
 94600. .       .        .     X C .      WE .        .        .        .        .        .        .        .
  4700. .       .        .     X C .      WE .        .        .        .        .        .        .        .
104800. .       .        .     X C .      WE .        .        .        .        .        .        .        .
  4900. .       .        .     X C .      WE .        .        .        .        .        .        .        .
115000. .       .        .     X C .      WE .        .        .        .        .        .        .        .
  5100. .       .        .      XC .      WE .        .        .        .        .        .        .        .
125200. .       .        .       X .      WE .        .        .        .        .        .        .        .
  5300. .       .        .       X .      WE .        .        .        .        .        .        .        .
  5400. .       .        .       X.       WE .        .        .        .        .        .        .        .
135500. .       .        .       X.       WE .        .        .        .        .        .        .        .
  5600. .       .        .        X       WE .        .        .        .        .        .        .        .
145700. .       .        .        X       WE .        .        .        .        .        .        .        .
  5800. .       .        .        .X      WE .        .        .        .        .        .        .        .
  5900. .       .        .        .X      WE .        .        .        .        .        .        .        .
  6000. .       .        .        .X      WE .        .        .        .        .        .        .        .
156100. .       .        .        . X     WE .        .        .        .        .        .        .        .
  6200. .       .        .        . X     WE .        .        .        .        .        .        .        .
  6300. .       .        .        . X     WE .        .        .        .        .        .        .        .
176400. .       .        .       XXXXX    WE .        .        .        .        .        .        .        .
196500. .       .        .        .     XXE .        .        .        .        .        .        .        .
206600. .       .        .        .     XWE .        .        .        .        .        .        .        .
  6700. .       .        .        .     XWE .        .        .        .        .        .        .        .
226800. .       .        .        .     XXX .        .        .        .        .        .        .        .
  6900. .       .        .        .    X WE .        .        .        .        .        .        .        .
237000. .       .        .        .    X WE .        .        .        .        .        .        .        .
257100. .       .        .        .   XXXWE .        .        .        .        .        .        .        .
277200. .       .      XXXXXXXXXXXXXXX  WE .        .        .        .        .        .        .        .
  7300. .       .      X.       C .      WE .        .        .        .        .        .        .        .
287400. .       .      X.       C .      WE .        .        .        .        .        .        .        .
317500. .       .     XX.       C .      WE .        .        .        .        .        .        .        .
347600. .  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  WE .        .        .        .        .        .        .        .
367700. .  XXXXXXXXXXXXXXXXXXX   C .      WE .        .        .        .        .        .        .        .
397800. .      .X       .        . XX   WE .        .        .        .        .        .        .        .
427900. .       .        .  XXXXXXXX      WE .        .        .        .        .        .        .        .
458000. .       .    X   XXXXXX  C .      WE .        .        .        .        .        .        .        .
468100. .       .        .    X  C .      WE .        .        .        .        .        .        .        .
488200. .       .        .  X    C .      WE .        .        .        .        .        .        .        .
508300. .       .        .    XXXXXXXXXXX WE .        .        .        .        .        .        .        .
  8400. .       .        .        .     XWE .        .        .        .        .        .        .        .
  8500. .       .        .        .     XWE .        .        .        .        .        .        .        .
  8600. .       .        .        .      XE .        .        .        .        .        .        .        .
528700. .       .        .        .       X .        .        .        .        .        .        .        .
538800. .       .        .        .     XWE .        .        .        .        .        .        .        .
```

```
548700. .        .        .        .     XWE .        .        .        .        .        .        .        .
569000. .        .        .        .   XXXXX .        .        .        .        .        .        .        .
589100. .        .       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX        .        .        .        .        .        .
609200. .       XXXXXXXX  .       C .      WE .        .        .        .        .        .        .        .
629300. .   XXX  .        .       C .      WE .        .        .        .        .        .        .        .
639400. .       .X        .       C .      WE .        .        .        .        .        .        .        .
649500. .        .      X  .       C .      WE .        .        .        .        .        .        .        .
659600. .        .       X.       C .      WE .        .        .        .        .        .        .    BANK.
669700. .        .    X   .       C .      WE .        .        .        .        .        .        .        .
  9800. .       X         .       C .      WE .        .        .        .        .        .        .        .
709900. .      XXXXXXXX   XX      C .      WE .        .        .        .        .        .        .        .
76***** .        .     XXX .  X    C .      WE .        .        .        .        .        .        .        .
79***** .        . XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  .        .        .        .        .        .    BANK.
 10200. .        .        .        .        .      X .        .        .        .        .        .        .
80***** .        .        .        .        .       X.        .        .        .        .        .        .
81***** .        .        .        .        .        .  X     .        .        .        .        .        .
82***** .        .        .        .        .        .  X     .        .        .        .        .        .
83***** .        .        .        .        .        .     X .        .        .        .        .        .
84***** .        .        .        .        .        .       X        .        .        .        .        .
85***** .        .        .        .        .        .        .   X   .        .        .        .        .
 10900. .        .        .        .        .        .        .     X .        .        .        .        .
86***** .        .        .        .        .        .        .       X        .        .        .        .
 11100. .        .        .        .        .        .        .        .  X     .        .        .        .
87***** .        .        .        .        .        .        .        .    X   .        .        .        .
 11300. .        .        .        .        .        .        .        .        .  X     .        .        .
88***** .        .        .        .        .        .        .        .        .        . X      .        .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1088.30	3910.00	1076.20	3988.00	1076.20	4053.00	1075.30	4152.00	1063.30	4222.00
1061.70	4257.00	1060.30	4384.00	1060.30	4579.00	1060.30	4816.00	1060.60	4983.00
1061.10	5243.00	1061.70	5463.00	1062.10	5672.00	1062.70	6060.00	1063.10	6413.00
1061.70	6445.00	1064.50	6465.00	1064.90	6523.00	1064.50	6586.00	1064.60	6755.00
1065.30	6834.00	1063.90	6956.00	1064.50	7086.00	1063.70	7131.00	1063.70	7162.00
1057.40	7184.00	1057.70	7354.00	1057.10	7473.00	1057.50	7517.00	1057.50	7538.00
1063.10	7571.00	1063.40	7614.00	1051.80	7638.00	1051.80	7707.00	1059.50	7733.00
1063.00	7781.00	1054.60	7800.00	1062.70	7808.00	1062.20	7859.00	1060.00	7893.00
1059.20	7908.00	1058.00	7964.00	1056.00	7988.00	1060.00	8039.00	1060.00	8128.00
1059.00	8171.00	1059.00	8207.00	1060.00	8280.00	1064.00	8312.00	1065.00	8711.00
1065.00	8745.00	1064.30	8817.00	1064.30	8915.00	1063.40	8996.00	1065.00	9047.00
1070.30	9082.00	1057.50	9103.00	1056.40	9152.00	1053.50	9187.00	1052.20	9287.00
1052.70	9334.00	1054.60	9354.00	1056.70	9476.00	1057.40	9605.00	1056.00	9722.00
1053.20	9869.00	1057.80	9881.00	1058.30	9910.00	1055.80	9926.00	1057.10	9966.00
1059.00	9976.00	1056.40	9981.00	1056.70	10000.00	1059.10	10010.00	1056.30	10021.00
1054.70	10064.00	1066.00	10092.00	1068.30	10142.00	1069.40	10258.00	1071.00	10375.00
1071.00	10490.00	1073.20	10594.00	1073.90	10703.00	1075.80	10848.00	1077.80	10984.00
1080.30	11187.00	1086.80	11377.00						

CROSS SECTION 12.47
STREAM AGUA FRIA RIVER
DISCHARGE= 96150.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1055.    1059.    1063.    1067.    1071.    1075.    1079.    1083.    1087.    1091.    1095.


   STA-FEET

 24100. .       .        .        .        .        .        X        .        .        .        .        .
 34200. .       .        .        .        .        X        .        .        .        .        .        .
  4300. .       .        .        .        X        .        .        .        .        .        .        .
 44400. .       .        .        .     X  .        .        .        .        .        .        .        .
 54500. .       .        .       XE.       .        .        .        .        .        .        .        .
 74600. .       .       .XXXX    E.       .        .        .        .        .        .        .        .
 84700. .       .       X   W    E.       .        .        .        .        .        .        .        .
 94800. .       .     X .   W    E.       .        .        .        .        .        .        .        .
  4900. .       .      X.   W    E.       .        .        .        .        .        .        .        .
105000. .       .       X   W    E.       .        .        .        .        .        .        .        .
  5100. .       .       X   W    E.       .        .        .        .        .        .        .        .
  5200. .       .      .X  W    E.       .        .        .        .        .        .        .        .
115300. .       .      .X  W    E.       .        .        .        .        .        .        .        .
  5400. .       .      . X W    E.       .        .        .        .        .        .        .        .
  5500. .       .      . X W    E.       .        .        .        .        .        .        .        .
125600. .       .      .  XW    E.       .        .        .        .        .        .        .        .
  5700. .       .      .  XW    E.       .        .        .        .        .        .        .        .
  5800. .       .      .  XW    E.       .        .        .        .        .        .        .        .
135900. .       .      .  XW    E.       .        .        .        .        .        .        .        .
  6000. .       .      .   X    E.       .        .        .        .        .        .        .        .
146100. .       .      .    X   E.       .        .        .        .        .        .        .        .
  6200. .       .      .    X   E.       .        .        .        .        .        .        .        .
156300. .       .      .    X   E.       .        .        .        .        .        .        .        .
  6400. .       .      .    X   E.       .        .        .        .        .        .        .        .
  6500. .       .      .     X  E.       .        .        .        .        .        .        .        .
166600. .       .      .     X  E.       .        .        .        .        .        .        .        .
  6700. .       .      .      X E.       .        .        .        .        .        .        .        .
  6800. .       .      .      X E.       .        .        .        .        .        .        .        .
  6900. .       .      .       XE.       .        .        .        .        .        .        .        .
177000. .       .      .       XE.       .        .        .        .        .        .        .        .
  7100. .       .      .        X.       .        .        .        .        .        .        .        .
187200. .       .      .        X.       .        .        .        .        .        .        .        .
197300. .       .      .        X.       .        .        .        .        .        .        .        .
217400. .       .      .      XXX.       .        .        .        .        .        .        .        .
227500. .       .   X    .   W    E.       .        .        .        .        .        .        .        .
247600. .       .   X    .   W    E.       .        .        .        .        .        .        .        .
267700. .       .   XXXX .   W    E.       .        .        .        .        .        .        .        .
277800. .       .        .     X  E.       .        .        .        .        .        .        .        .
297900. .       .        .    XX  E.       .        .        .        .        .        .        .        .
318000. .       .     XXXXXXXX    E.       .        .        .        .        .        .        .        .
328100. .       .       .X  W    E.       .        .        .        .        .        .        .        .
338200. .       . X      .   W    E.       .        .        .        .        .        .        .        .
  8300. .       . X      .   W    E.       .        .        .        .        .        .        .        .
348400. .       . X      .   W    E.       .        .        .        .        .        .        .        .
368500. .       . XXXX   .   W    E.       .        .        .        .        .        .        .        .
378600. .       .        .     X  E.       .        .        .        .        .        .        .        .
388700. .       .        .       XE.       .        .        .        .        .        .        .        .
  8800. .       .        .        X.       .        .        .        .        .        .        .        .
398900. .       .        .         X       .        .        .        .        .        .        .        .
  9000. .       .        .         X       .        .        .        .        .        .        .        .
```

```
419100. .         .         .         .XX       .         .         .         .         .         .         .         .
  9200. .         .         .       XE.         .         .         .         .         .         .         .         .
439300. .         .         .    XXXXE.         .         .         .         .         .         .         .     BANK.
449400. .       X .         .   W   E.         .         .         .         .         .         .         .         .
459500. .    X    .         .   W   E.         .         .         .         .         .         .         .         .
489600. .XXXX     .         .X  W   E.         .         .         .         .         .         .         .         .
  9700. . X       .         .   W   E.         .         .         .         .         .         .         .         .
499800. X         .         .   W   E.         .         .         .         .         .         .         .         .
539900. .XX  XXXXX.         .   W   E.         .         .         .         .         .         .         .         .
54***** .         X         .   W   E.         .         .         .         .         .         .         .         .
55***** .       X .         .   W   E.         .         .         .         .         .         .         .         .
57***** .  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      .         .         .         .         .         .         .     BANK.
 10300. .         .         .         .   X     .         .         .         .         .         .         .         .
58***** .         .         .         .     X   .         .         .         .         .         .         .         .
 10500. .         .         .         .      X  .         .         .         .         .         .         .         .
59***** .         .         .         .       X .         .         .         .         .         .         .         .
 10700. .         .         .         .         .X        .         .         .         .         .         .         .
60***** .         .         .         .          . X      .         .         .         .         .         .         .
61***** .         .         .         .            .    X .         .         .         .         .         .         .
 11000. .         .         .         .            .      .X        .         .         .         .         .         .
62***** .         .         .         .            .      . X       .         .         .         .         .         .
 11200. .         .         .         .            .      .  X      .         .         .         .         .         .
63***** .         .         .         .            .      .   X     .         .         .         .         .         .
64***** .         .         .         .            .      .      X. .         .         .         .         .         .
65***** .         .         .         .            .      .       . X .         .         .         .         .         .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1078.90	4130.00	1075.10	4237.00	1069.90	4363.00	1066.10	4523.00	1064.50	4597.00
1063.40	4633.00	1063.10	4653.00	1062.30	4758.00	1063.00	4969.00	1063.40	5261.00
1064.20	5650.00	1064.20	5873.00	1065.00	6072.00	1065.10	6332.00	1065.30	6644.00
1066.30	6959.00	1066.70	7235.00	1066.50	7333.00	1066.50	7365.00	1065.70	7445.00
1060.90	7469.00	1060.90	7554.00	1060.90	7643.00	1060.90	7676.00	1062.10	7684.00
1065.40	7775.00	1065.40	7889.00	1065.00	7940.00	1061.80	8011.00	1064.60	8027.00
1063.40	8117.00	1060.00	8231.00	1060.00	8351.00	1060.00	8453.00	1061.60	8486.00
1065.50	8552.00	1066.30	8688.00	1066.80	8907.00	1067.40	9094.00	1067.90	9141.00
1066.00	9251.00	1065.00	9340.00	1058.00	9389.00	1057.10	9506.00	1055.60	9559.00
1063.60	9584.00	1056.60	9606.00	1055.20	9789.00	1056.80	9888.00	1055.50	9906.00
1055.80	9926.00	1058.40	9934.00	1059.10	10000.00	1058.30	10118.00	1056.20	10190.00
1067.90	10205.00	1069.40	10391.00	1070.30	10580.00	1072.30	10779.00	1074.30	10935.00
1076.30	11112.00	1076.80	11253.00	1078.40	11383.00	1082.00	11470.00		

CROSS SECTION 12.58
STREAM AGUA FRIA RIVER
DISCHARGE= 96750.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1050.    1054.    1058.    1062.    1066.    1070.    1074.    1078.    1082.    1086.    1090.


   STA-FEET

 24600. .        .        .        .        .        .        .        .        X .      .        .        .
 34700. .        .        .        .        .        .        .   X    .        .        .        .        .
 44800. .        .        .        .        .        .        X        .        .        .        .        .
 64900. .        .        .        .        .    XXXXX        .        .        .        .        .        .
 85000. .        .        .        .    XXX .C W   E .        .        .        .        .        .        .
  5100. .        .        .        .      X .C W   E .        .        .        .        .        .        .
 95200. .        .        .        .     X  .C W   E .        .        .        .        .        .        .
105300. .        .        .        .     X  .C W   E .        .        .        .        .        .        .
  5400. .        .        .        .      X .C W   E .        .        .        .        .        .        .
  5500. .        .        .        .        XC W   E .        .        .        .        .        .        .
115600. .        .        .        .        XC W   E .        .        .        .        .        .        .
  5700. .        .        .        .        XC W   E .        .        .        .        .        .        .
125800. .        .        .        .        XC W   E .        .        .        .        .        .        .
135900. .        .        .        .        XC W   E .        .        .        .        .        .        .
  6000. .        .        .        .        XC W   E .        .        .        .        .        .        .
146100. .        .        .        .        XC W   E .        .        .        .        .        .        .
156200. .        .        .        .        . XW   E .        .        .        .        .        .        .
166300. .        .        .        .        . XW   E .        .        .        .        .        .        .
  6400. .        .        .        .        .   X  E .        .        .        .        .        .        .
176500. .        .        .        .        .   X  E .        .        .        .        .        .        .
186600. .        .        .        .        .    X E .        .        .        .        .        .        .
206700. .        .        .        .        .    X E .        .        .        .        .        .        .
  6800. .        .        .        .        .    X E .        .        .        .        .        .        .
226900. .        .        .        .        .    X E .        .        .        .        .        .        .
237000. .        .        .        .        .    X E .        .        .        .        .        .        .
  7100. .        .        .        .        .     XE .        .        .        .        .        .        .
247200. .        .        .        .        .     XE .        .        .        .        .        .        .
257300. .        .        .        .        .     XE .        .        .        .        .        .        .
  7400. .        .        .        .        .     XE .        .        .        .        .        .        .
267500. .        .        .        .        .    X E .        .        .        .        .        .        .
277600. .        .        .        .        .      X .        .        .        .        .        .        .
287700. .        .        .        .        .   X  E .        .        .        .        .        .        .
297800. .        .        .        .        .       X .        .        .        .        .        .        .
317900. .        .        .        . XXXXXXXXXXXXXXXXX.        .        .        .        .        .        .
348000. .        .        .        .  XXXXXXX.C W   E .        .        .        .        .        .        .
358100. .        .        .        .      X .C W   E .        .        .        .        .        .        .
368200. .        .        .        .        XC W   E .        .        .        .        .        .        .
388300. .        .        .        .    XXXXX.C W   E .        .        .        .        .        .        .
408400. .        .        .      XXX       .C W   E .        .        .        .        .        .        .
418500. .        .        .       .X       .C W   E .        .        .        .        .        .        .
428600. .        .        .        . X     .C W   E .        .        .        .        .        .        .
448700. .        .        .    XXXXXXXXX   .C W   E .        .        .        .        .        .        .
458800. .        .        .        .        . X   E .        .        .        .        .        .        .
  8900. .        .        .        .        .   X  E .        .        .        .        .        .        .
469000. .        .        .        .        .    X E .        .        .        .        .        .        .
  9100. .        .        .        .        .     XE .        .        .        .        .        .        .
  9200. .        .        .        .        .     XE .        .        .        .        .        .        .
479300. .        .        .        .        .     XE .        .        .        .        .        .        .
489400. .        .        .        .        XC W   E .        .        .        .        .        .   BANK.
499500. .        .     X.         .        .C W   E .        .        .        .        .        .        .
```

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519600. .        .      XXXXXX      .        .C W   E .        .        .        .        .        .        .
529700. .        .      X .         .        .C W   E .        .        .        .        .        .        .
539800. .        .        . X       .        .C W   E .        .        .        .        .        .        .
559900. .        .        XXXX      .        .C W   E .        .        .        .        .        .        .
57***** .        .       XXXXXX     .        .C W   E .        .        .        .        .        .        .
58***** .        .        .   X     .        .C W   E .        .        .        .        .        .        .
60***** .        .        .      XXXX        .C W   E .        .        .        .        .        .        .
62***** .       .XXXXXXXXXXXXXXXXX .         .C W   E .        .        .        .        .        .        .
65***** .        .  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXE .        .        .        .        .        .   BANK.
66***** .        .        .        .        .        . X      .        .        .        .        .        .
67***** .        .        .        .        .        . X      .        .        .        .        .        .
 10700. .        .        .        .        .        .   X    .        .        .        .        .        .
68***** .        .        .        .        .        .    X   .        .        .        .        .        .
69***** .        .        .        .        .        .        X        .        .        .        .        .
 11000. .        .        .        .        .        .        .X       .        .        .        .        .
70***** .        .        .        .        .        .        . X      .        .        .        .        .
 11200. .        .        .        .        .        .        .   X    .        .        .        .        .
71***** .        .        .        .        .        .        .     X .        .        .        .        .
 11400. .        .        .        .        .        .        .       X        .        .        .        .
72***** .        .        .        .        .        .        .        . X     .        .        .        .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1081.00	4610.00	1075.90	4712.00	1073.80	4785.00	1070.10	4860.00	1068.50	4925.00
1064.60	4959.00	1065.10	4985.00	1064.90	5212.00	1064.90	5345.00	1065.90	5561.00
1065.90	5778.00	1065.90	5935.00	1065.90	6079.00	1066.90	6248.00	1066.90	6324.00
1067.70	6479.00	1067.90	6587.00	1068.10	6657.00	1068.10	6740.00	1068.10	6852.00
1068.10	6932.00	1068.10	7041.00	1068.30	7223.00	1068.30	7346.00	1068.20	7499.00
1068.90	7626.00	1067.40	7718.00	1069.30	7808.00	1069.40	7890.00	1062.90	7925.00
1063.30	7966.00	1063.30	8030.00	1065.40	8038.00	1065.00	8092.00	1066.20	8171.00
1065.40	8288.00	1064.00	8330.00	1062.40	8396.00	1061.50	8424.00	1062.60	8491.00
1062.80	8620.00	1061.10	8659.00	1064.30	8701.00	1067.00	8789.00	1068.20	9040.00
1068.30	9265.00	1066.20	9450.00	1057.40	9483.00	1057.00	9588.00	1059.00	9621.00
1057.00	9669.00	1059.10	9751.00	1059.10	9858.00	1058.00	9883.00	1057.40	9979.00
1059.50	10000.00	1060.00	10113.00	1062.40	10171.00	1061.00	10228.00	1061.00	10317.00
1054.60	10334.00	1055.00	10357.00	1068.30	10378.00	1068.30	10416.00	1071.00	10464.00
1071.10	10609.00	1072.60	10782.00	1073.80	10945.00	1074.70	11091.00	1077.10	11301.00
1078.80	11485.00								

CROSS SECTION 12.70
STREAM AGUA FRIA RIVER
DISCHARGE= 96850.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1055.    1059.    1063.    1067.    1071.    1075.    1079.    1083.    1087.    1091.    1095.


   STA-FEET

 24700. .       .        .        .        .        .        .  X     .        .        .        .        .
 34800. .       .        .        .        .        .     X.        .        .        .        .        .
 44900. .       .        .        .        .      X  .        .        .        .        .        .        .
 55000. .       .        .        .        .    X  .        .        .        .        .        .        .
 85100. .       .        .        .   XXXXXXXXXXX  .        .        .        .        .        .        .
115200. .       .        .        .   X  E.        .        .        .        .        .        .        .
135300. .       .        .        . XX W  E.        .        .        .        .        .        .        .
145400. .       .        .        . XC W  E.        .        .        .        .        .        .        .
  5500. .       .        .        .  X W  E.        .        .        .        .        .        .        .
155600. .       .        .        .  XW  E.        .        .        .        .        .        .        .
  5700. .       .        .        .  XW  E.        .        .        .        .        .        .        .
165800. .       .        .        .  XW  E.        .        .        .        .        .        .        .
  5900. .       .        .        .   X  E.        .        .        .        .        .        .        .
176000. .       .        .        .   X  E.        .        .        .        .        .        .        .
  6100. .       .        .        .   X  E.        .        .        .        .        .        .        .
186200. .       .        .        .   X  E.        .        .        .        .        .        .        .
196300. .       .        .        .   X  E.        .        .        .        .        .        .        .
  6400. .       .        .        .   X  E.        .        .        .        .        .        .        .
206500. .       .        .        .   X  E.        .        .        .        .        .        .        .
  6600. .       .        .        .   X  E.        .        .        .        .        .        .        .
  6700. .       .        .        .    X E.        .        .        .        .        .        .        .
216800. .       .        .        .    X E.        .        .        .        .        .        .        .
246900. .       .        .        .    XXXE.        .        .        .        .        .        .        .
257000. .       .        .        .      XE.        .        .        .        .        .        .        .
267100. .       .        .        .      XE.        .        .        .        .        .        .        .
287200. .       .        .        .   XXX E.        .        .        .        .        .        .        .
307300. .       .        .        .   XXXXE.        .        .        .        .        .        .        .
317400. .       .        .        .     X E.        .        .        .        .        .        .        .
  7500. .       .        .        .     X E.        .        .        .        .        .        .        .
357600. .       .        .        .     X  .   X    .        .        .        .        .        .        .
367700. .       .        .        .     X E.        .        .        .        .        .        .        .
377800. .       .        .        .     X E.        .        .        .        .        .        .        .
387900. .       .        .        . XC W  E.        .        .        .        .        .        .        .
408000. .       .        .        .X C W  E.        .        .        .        .        .        .        .
458100. .       .        .XXXXXXXXXXX C W  E.        .        .        .        .        .        .        .
488200. .       .        .        XXXXXXXXXXXX       .        .        .        .        .        .        .
498300. .       .        .   X    .  C W  E.        .        .        .        .        .        .        .
508400. .       .        .   X    .  C W  E.        .        .        .        .        .        .        .
  8500. .       .        .    X   .  C W  E.        .        .        .        .        .        .        .
528600. .       .        .    X   .  C W  E.        .        .        .        .        .        .        .
548700. .       .        .   XXX  .  C W  E.        .        .        .        .        .        .        .
568800. .       .        .  XXXXXXX  C W  E.        .        .        .        .        .        .        .
578900. .       .        .        . XC W  E.        .        .        .        .        .        .        .
589000. .       .        .        .  XW  E.        .        .        .        .        .        .        .
599100. .       .        .        .  XW  E.        .        .        .        .        .        .        .
  9200. .       .        .        .  XW  E.        .        .        .        .        .        .        .
609300. .       .        .        .  XW  E.        .        .        .        .        .        .        .
  9400. .       .        .        .  XW  E.        .        .        .        .        .        .        .
639500. .    XXXXXXXXXXXXXXXXXXXXXXXXXXW  E.        .        .        .        .        .        .   BANK.
  9600. .      X.        .        . C W  E.        .        .        .        .        .        .        .
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```
699700. .      XX.     X  .        .  C W   E.        .        .        .        .        .        .
699800. .        .XXXXXXX  .        .  C W   E.        .        .        .        .        .        .
709900. .        .       X .        .  C W   E.        .        .        .        .        .        .
73***** .      XXXXXXX     .        .  C W   E.        .        .        .        .        .        .
74***** .        .       X.         .  C W   E.        .        .        .        .        .        .
 10200. .        .        X         .  C W   E.        .        .        .        .        .        .
75***** .        .        .X        .  C W   E.        .        .        .        .        .        .
76***** .        .       X.         .  C W   E.        .        .        .        .        .        .
79***** .        .       XXXXXXXXXXXXXXXXXXXXXXXXXXXXX .        .        .        .        .        BANK.
80***** .        .        .         .        .       X .        .        .        .        .        .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1080.50	4711.00	1078.50	4833.00	1076.60	4921.00	1073.90	5025.00	1072.90	5067.00
1072.20	5094.00	1069.00	5116.00	1068.80	5166.00	1068.80	5221.00	1068.80	5235.00
1067.70	5252.00	1068.10	5331.00	1067.70	5442.00	1068.60	5628.00	1068.60	5788.00
1069.00	5963.00	1069.00	6151.00	1069.00	6322.00	1069.00	6516.00	1069.30	6754.00
1069.30	6866.00	1069.50	6877.00	1070.30	6883.00	1070.10	6956.00	1070.30	7084.00
1069.80	7183.00	1069.00	7229.00	1070.10	7254.00	1069.10	7284.00	1069.70	7398.00
1069.70	7575.00	1069.70	7601.00	1072.70	7614.00	1069.80	7626.00	1069.80	7744.00
1069.80	7828.00	1067.90	7859.00	1067.30	7962.00	1067.30	8043.00	1063.40	8060.00
1065.00	8070.00	1066.90	8078.00	1067.30	8108.00	1066.50	8142.00	1067.00	8171.00
1070.60	8213.00	1071.40	8222.00	1064.80	8343.00	1064.80	8448.00	1065.50	8572.00
1065.40	8637.00	1064.80	8691.00	1065.80	8735.00	1066.80	8780.00	1064.70	8835.00
1067.90	8898.00	1068.40	9001.00	1068.40	9117.00	1068.60	9257.00	1068.40	9467.00
1065.10	9514.00	1057.80	9531.00	1058.60	9659.00	1061.50	9670.00	1061.50	9699.00
1058.20	9744.00	1059.60	9789.00	1061.80	9823.00	1062.30	9917.00	1058.30	9975.00
1058.30	10000.00	1060.40	10049.00	1062.60	10140.00	1063.40	10294.00	1062.60	10396.00
1062.60	10462.00	1065.00	10513.00	1074.20	10539.00	1074.20	10574.00		

CROSS SECTION 12.81
STREAM AGUA FRIA RIVER
DISCHARGE= 97200.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1060.    1064.    1068.    1072.    1076.    1080.    1084.    1088.    1092.    1096.    1100.


   STA-FEET

 25000. .        .        .        .        .        .        .        .  X     .        .        .        .
 35100. .        .        .        .        .        .        .        . X      .        .        .        .
 45200. .        .        .        .        .        .        .        . X      .        .        .        .
 75300. .        .        .        .  XXXXXXX        .        .        .        .        .        .        .
 95400. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
115500. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
125600. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
135700. .        .        .    X   W.   E    .        .        .        .        .        .        .        .
145800. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
  5900. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
156000. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
  6100. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
166200. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
  6300. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
176400. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
186500. .        .        .      X W.   E    .        .        .        .        .        .        .        .
196600. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
  6700. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
206800. .        .        .     X  W.   E    .        .        .        .        .        .        .        .
  6900. .        .        .      X W.   E    .        .        .        .        .        .        .        .
227000. .        .        .      X W.   E    .        .        .        .        .        .        .        .
237100. .        .        .       XW.   E    .        .        .        .        .        .        .        .
  7200. .        .        .       XW.   E    .        .        .        .        .        .        .        .
247300. .        .        .       XW.   E    .        .        .        .        .        .        .        .
  7400. .        .        .       XW.   E    .        .        .        .        .        .        .        .
257500. .        .        .       XW.   E    .        .        .        .        .        .        .        .
267600. .        .        .       XW.   E    .        .        .        .        .        .        .        .
277700. .        .        .       XW.   E    .        .        .        .        .        .        .        .
  7800. .        .        .       XW.   E    .        .        .        .        .        .        .        .
307900. .        .        .       XW.   E    .        .        .        .        .        .        .        .
338000. .        .        .       XXXXXX X   .        .        .        .        .        .        .        .
368100. .        .        .        XXXXXE    .        .        .        .        .        .        .        .
398200. .        .        .       XXXXXXX    .        .        .        .        .        .        .        .
448300. .        .        .       XXXXXXE    .        .        .        .        .        .        .        .
488400. .        .       XXXXXXXXXXXXXXXXXXXX        .        .        .        .        .        .        .
498500. .        .       X        W.   E    .        .        .        .        .        .        .        .
518600. .        .      XXXXXX    W.   E    .        .        .        .        .        .        .        .
  8700. .        .    X  .        W.   E    .        .        .        .        .        .        .        .
528800. .        .    X  .        W.   E    .        .        .        .        .        .        .        .
538900. .        .       X        W.   E    .        .        .        .        .        .        .        .
  9000. .        .       .X       W.   E    .        .        .        .        .        .        .        .
549100. .        .       . X      W.   E    .        .        .        .        .        .        .        .
  9200. .        .       .  X     W.   E    .        .        .        .        .        .        .        .
559300. .        .       .   X    W.   E    .        .        .        .        .        .        .        .
569400. .        .       .     X  W.   E    .        .        .        .        .        .        .        .
  9500. .        .       .       XW.   E    .        .        .        .        .        .        .        .
609600. . XXXXXXXXXXXXXXXXXXXXXXXXXW.   E    .        .        .        .        .        .        .   BANK.
619700. .       X.       .        W.   E    .        .        .        .        .        .        .        .
629800. . X     .        .        W.   E    .        .        .        .        .        .        .        .
639900. .  X    .        .        W.   E    .        .        .        .        .        .        .        .
-------  ------                    ..   -
```

```
65      .XXXX     .         .         W.   E     .         .         .         .         .         .         .         .
66***** .       X .         .         W.   E     .         .         .         .         .         .         .         .
67***** .         .   X     .         W.   E     .         .         .         .         .         .         .         .
70***** .         .   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.         .         .         .         .         .         .
71***** .         .         .         .         .         .         .X        .         .         .         .         .     BANK.
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1089.70	5035.00	1089.00	5118.00	1089.00	5240.00	1075.90	5274.00	1074.20	5297.00
1073.70	5328.00	1070.60	5361.00	1070.60	5447.00	1070.60	5498.00	1070.60	5517.00
1070.60	5602.00	1070.10	5686.00	1070.30	5844.00	1070.30	6001.00	1070.30	6163.00
1070.30	6376.00	1070.90	6517.00	1070.50	6643.00	1070.50	6782.00	1070.90	6967.00
1070.90	7016.00	1071.00	7134.00	1071.30	7334.00	1071.00	7465.00	1071.30	7595.00
1071.10	7745.00	1071.10	7885.00	1071.10	7906.00	1071.10	7929.00	1071.10	8012.00
1073.90	8024.00	1073.30	8044.00	1073.00	8063.00	1073.30	8120.00	1071.70	8149.00
1071.10	8192.00	1071.70	8218.00	1073.70	8236.00	1073.00	8278.00	1071.10	8299.00
1071.10	8308.00	1071.10	8319.00	1071.10	8333.00	1075.80	8351.00	1071.00	8385.00
1071.00	8399.00	1068.20	8424.00	1068.20	8489.00	1069.40	8591.00	1067.40	8650.00
1066.30	8781.00	1067.80	8928.00	1068.80	9090.00	1069.60	9263.00	1070.30	9434.00
1071.20	9551.00	1066.20	9581.00	1064.80	9615.00	1061.10	9631.00	1063.60	9704.00
1061.00	9764.00	1061.40	9895.00	1060.40	9984.00	1061.50	10000.00	1063.00	10122.00
1065.80	10214.00	1065.40	10290.00	1077.90	10321.00	1079.60	10340.00	1080.60	10351.00

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CROSS SECTION     13.00
STREAM  AGUA FRIA RIVER
DISCHARGE=    97200.


PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV 1060.     1064.     1068.     1072.     1076.     1080.     1084.     1088.     1092.     1096.     1100.


    STA-FEET

 25600. .         .         .         .         .         .         .         .         .         .         .       X .
 65700. .         .         .         .         .         .         .         .         .         .   X  XXXXXXXXXXX .
 95800. .         .         .         .         .         .         .         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    .
125900. .         .         .         .         .         .         .  XXXXXXXXXXXX      .         .         .         .
146000. .         .         .         .         .         .         XXXX      .         .         .         .         .
156100. .         .         .         .         .         .         X         .         .         .         .         .
186200. .         .         .         .       XXXXXXXXXXXXXXXXXXXXX .         .         .         .         .         .
216300. .         .         .         .  XXX WE .         .         .         .         .         .         .         .
226400. .         .         .       X . C    WE .         .         .         .         .         .         .         .
236500. .         .         .       X . C    WE .         .         .         .         .         .         .         .
246600. .         .         .       X . C    WE .         .         .         .         .         .         .         .
256700. .         .         .       X . C    WE .         .         .         .         .         .         .         .
266800. .         .         .       X . C    WE .         .         .         .         .         .         .         .
276900. .         .         .       X . C    WE .         .         .         .         .         .         .         .
287000. .         .         .       X . C    WE .         .         .         .         .         .         .         .
297100. .         .         .       X . C    WE .         .         .         .         .         .         .         .
317200. .         .         .         .  X   WE .         .         .         .         .         .         .         .
327300. .         .         .       X . C    WE .         .         .         .         .         .         .         .
337400. .         .         .       X . C    WE .         .         .         .         .         .         .         .
347500. .         .         .       X . C    WE .         .         .         .         .         .         .         .
357600. .         .         .       X . C    WE .         .         .         .         .         .         .         .
367700. .         .         .    X    . C    WE .         .         .         .         .         .         .         .
377800. .         .         .    X    . C    WE .         .         .         .         .         .         .         .
387900. .         .         .    X    . C    WE .         .         .         .         .         .         .         .
408000. .         .         .    X    . C    WE .         .         .         .         .         .         .         .
428100. .         .         .  XXX    . C    WE .         .         .         .         .         .         .         .
448200. .         .         .       X . C    WE .         .         .         .         .         .         .         .
498300. .         .      XXXXXXXXXXX X C    WE .         .         .         .         .         .         .         .
518400. .         .         .    X    . C    WE .         .         .         .         .         .         .         .
538500. .         .         .    X    . C    WE .         .         .         .         .         .         .         .
558600. .         .         .    XXXX . C    WE .         .         .         .         .         .         .         .
578700. .         .         .       X . C    WE .         .         .         .         .         .         .         .
598800. .         .         .    XXXX . C    WE .         .         .         .         .         .         .         .
618900. .         .         .  X      . C    WE .         .         .         .         .         .         .         .
639000. .         .         .    XXXXXX C    WE .         .         .         .         .         .         .         .
659100. .         .         .    XXXX . C    WE .         .         .         .         .         .         .         .
669200. .         .         .       X . C    WE .         .         .         .         .         .         .         .
699300. .         .      X XXXXXXXXX . C    WE .         .         .         .         .         .         .         .
719400. .         .        XXXX      . C    WE .         .         .         .         .         .         .         .
729500. .         .        X         . C    WE .         .         .         .         .         .         .         .
749600. .         .         .  XXX    . C    WE .         .         .         .         .         .         .         .
769700. .         .         .    X    . C    WE .         .         .         .         .         .         .         .
799800. .    XXXXXXXXXXXXXXXXXXXX    . C    WE .         .         .         .         .         .         .     BANK.
829900. XXXXXXXXXXXXXXXXXXXXXXXXX    . C    WE .         .         .         .         .         .         .         .
85***** .  X      .         .         . C    WE .         .         .         .         .         .         .         .
87***** .  X      .         .         . C    WE .         .         .         .         .         .         .         .
88***** .  X      .         .         . C    WE .         .         .         .         .         .         .         .
92***** .  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX .  X      .         .         .         .         .     BANK.
95***** .         .         .         .  XXXXXXXXXXX      .         .         .         .         .         .         .
96***** .         .         .         .  X   WE .         .         .         .         .         .         .         .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1103.00	5621.00	1103.00	5660.00	1098.00	5686.00	1100.00	5702.00	1099.00	5739.00
1102.00	5769.00	1095.00	5799.00	1088.00	5841.00	1089.00	5874.00	1085.00	5912.00
1085.00	5938.00	1084.00	5977.00	1085.00	6050.00	1084.00	6138.00	1083.00	6160.00
1075.00	6192.00	1075.00	6225.00	1074.00	6252.00	1074.00	6289.00	1073.00	6339.00
1071.00	6392.00	1071.00	6488.00	1071.00	6569.00	1071.00	6689.00	1071.00	6792.00
1071.00	6905.00	1071.00	7030.00	1071.00	7121.00	1073.00	7202.00	1073.00	7220.00
1071.00	7302.00	1071.00	7393.00	1071.00	7519.00	1071.00	7620.00	1070.00	7698.00
1070.00	7788.00	1070.00	7879.00	1070.00	7960.00	1070.00	8027.00	1070.00	8100.00
1069.00	8146.00	1071.00	8188.00	1071.00	8224.00	1071.00	8261.00	1072.00	8299.00
1068.00	8306.00	1071.00	8323.00	1067.00	8342.00	1070.00	8379.00	1070.00	8414.00
1070.00	8471.00	1070.00	8518.00	1070.00	8566.00	1071.00	8615.00	1071.00	8660.00
1071.00	8714.00	1070.00	8768.00	1071.00	8814.00	1069.00	8860.00	1069.00	8917.00
1072.00	8970.00	1070.00	9030.00	1070.00	9084.00	1071.00	9148.00	1071.00	9210.00
1071.00	9273.00	1067.00	9300.00	1068.00	9337.00	1069.00	9395.00	1068.00	9443.00
1068.00	9503.00	1069.00	9568.00	1070.00	9629.00	1070.00	9687.00	1070.00	9744.00
1070.00	9793.00	1063.00	9810.00	1062.00	9850.00	1060.00	9897.00	1061.00	9935.00
1070.00	9949.00	1061.00	9967.00	1061.00	10000.00	1061.00	10045.00	1061.00	10084.00
1061.00	10138.00	1061.00	10198.00	1061.00	10255.00	1074.00	10270.00	1081.00	10299.00
1079.00	10319.00	1077.00	10353.00	1073.00	10392.00	1073.00	10430.00	1073.00	10452.00

CROSS SECTION 13.18
STREAM AGUA FRIA RIVER
DISCHARGE= 97200.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1060.    1064.    1068.    1072.    1076.    1080.    1084.    1088.    1092.    1096.    1100.


   STA-FEET

 26150. .        .        .        .                 .        .   X    .        .        .        .        .
 66250. .        .        .        .                XXXXXXXXXXX       .        .        .        .        .
 76350. .        .        .        .                X        .        .        .        .        .        .
116450. .        .        .        .          XXXXXX .        .        .        .        .        .        .
136550. .        .        .        .      X W E      .        .        .        .        .        .        .
166650. .        .        .        .   XXXX W E      .        .        .        .        .        .        .
196750. .        .        .        .  XXXXXX W E      .        .        .        .        .        .        .
206850. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
226950. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
237050. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
247150. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
257250. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
267350. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
277450. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
297550. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
307650. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
317750. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
337850. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
347950. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
368050. .        .        .        .  X  C   W E      .        .        .        .        .        .        .
408150. .        .        .      X X    C   W E      .        .        .        .        .        .        .
428250. .        .        .      XXXXXX C   W E      .        .        .        .        .        .        .
448350. .        .        .        XXXX C   W E      .        .        .        .        .        .        .
478450. .        .        .        XXXX C   W E      .        .        .        .        .        .        .
498550. .        .        .        . XXXC   W E      .        .        .        .        .        .        .
528650. .        .        .      XXXXXXXC   W E      .        .        .        .        .        .        .
548750. .        .        .        X    C   W E      .        .        .        .        .        .        .
568850. .        .        .        XXXXXXC   W E      .        .        .        .        .        .        .
588950. .        .        .        XXXXXXC   W E      .        .        .        .        .        .        .
609050. .        .        .        . X  C   W E      .        .        .        .        .        .        .
639150. .        .        .   XXXXXXXXX XC   W E      .        .        .        .        .        .        .
659250. .        .        . X      .    C   W E      .        .        .        .        .        .        .
679350. .        .        .      X .    C   W E      .        .        .        .        .        .        .
699450. .        .        .      XXX    C   W E      .        .        .        .        .        .        .
719550. .        .        .        X    C   W E      .        .        .        .        .        .        .
739650. .        .        .      X .    C   W E      .        .        .        .        .        .        .
779750. .   XXXXXXXXXXXXXXXXXXXXXXX .    C   W E      .        .        .        .        .        .   BANK.
799850. .        X        .        .    C   W E      .        .        .        .        .        .        .
819950. .        X        .        .    C   W E      .        .        .        .        .        .        .
84***** .        X        .        .    C   W E      .        .        .        .        .        .        .
86***** .        .   XXXX .        .    C   W E      .        .        .        .        .        .        .
88***** .        .   XXXX .        .    C   W E      .        .        .        .        .        .        .
91***** .        .        .        .                X XXXXXXXXX .        .        .        .        .   BANK.
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1086.00	6185.00	1084.00	6232.00	1083.00	6256.00	1082.00	6269.00	1080.00	6287.00
1080.00	6351.00	1079.00	6427.00	1076.00	6453.00	1077.00	6467.00	1077.00	6481.00
1075.00	6520.00	1075.00	6547.00	1075.00	6601.00	1074.00	6677.00	1074.00	6689.00

1073.00	6708.00	1073.00	6719.00	1073.00	6746.00	1073.00	6838.00	1073.00	6907.00
1073.00	6991.00	1073.00	7080.00	1073.00	7176.00	1073.00	7267.00	1073.00	7337.00
1073.00	7427.00	1073.00	7510.00	1073.00	7592.00	1073.00	7683.00	1073.00	7748.00
1073.00	7835.00	1073.00	7900.00	1073.00	7972.00	1073.00	8023.00	1073.00	8058.00
1072.00	8108.00	1071.00	8133.00	1072.00	8168.00	1072.00	8192.00	1071.00	8239.00
1073.00	8288.00	1073.00	8333.00	1072.00	8378.00	1072.00	8417.00	1072.00	8468.00
1073.00	8495.00	1073.00	8513.00	1074.00	8567.00	1074.00	8608.00	1073.00	8643.00
1071.00	8680.00	1072.00	8730.00	1072.00	8775.00	1072.00	8833.00	1074.00	8880.00
1074.00	8921.00	1072.00	8968.00	1073.00	9027.00	1073.00	9082.00	1073.00	9112.00
1074.00	9163.00	1070.00	9178.00	1069.00	9219.00	1069.00	9271.00	1071.00	9318.00
1071.00	9358.00	1071.00	9411.00	1072.00	9470.00	1072.00	9525.00	1072.00	9588.00
1071.00	9639.00	1071.00	9679.00	1071.00	9726.00	1068.00	9741.00	1066.00	9760.00
1062.00	9786.00	1064.00	9819.00	1064.00	9879.00	1064.00	9949.00	1064.00	10000.00
1064.00	10021.00	1064.00	10060.00	1064.00	10094.00	1066.00	10135.00	1067.00	10180.00
1067.00	10229.00	1066.00	10281.00	1083.00	10311.00	1079.00	10329.00	1080.00	10355.00

CROSS SECTION 13.36
STREAM AGUA FRIA RIVER
DISCHARGE= 99000.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1065.    1069.    1073.    1077.    1081.    1085.    1089.    1093.    1097.    1101.    1105.


   STA-FEET

 26450. .        .        .        .        .        .        .      X .        .        .        .        .
 46550. .        .        .        .        .        .        .        .  XXXXXXXX        .        .        .
 56650. .        .        .        .        .        .        .        .      .   X        .        .        .
 76750. .        .        .        .        .        .        .        .   XXXXXX        .        .        .
 96850. .        .        .        .        .        .  XXXXXXXXXXX        .        .        .        .        .
126950. .        .        .        XXXXXXXXXXXXXXXXXX .        .        .        .        .        .        .
157050. .        .        .   XXXXXX  W E   .        .        .        .        .        .        .        .
167150. .        .        .   X C  .  W E   .        .        .        .        .        .        .        .
187250. .        .        .   XXXX .  W E   .        .        .        .        .        .        .        .
197350. .        .        .      X .  W E   .        .        .        .        .        .        .        .
217450. .        .        .      X .  W E   .        .        .        .        .        .        .        .
227550. .        .        .      X .  W E   .        .        .        .        .        .        .        .
237650. .        .        .      X .  W E   .        .        .        .        .        .        .        .
257750. .        .        .      X .  W E   .        .        .        .        .        .        .        .
267850. .        .        .      X .  W E   .        .        .        .        .        .        .        .
297950. .        .        .      X .  W E   .        .        .        .        .        .        .        .
318050. .        .        .   XXXX .  W E   .        .        .        .        .        .        .        .
338150. .        .        .   X C  .  W E   .        .        .        .        .        .        .        .
358250. .        .        . XXX C  .  W E   .        .        .        .        .        .        .        .
378350. .        .        .      X .  W E   .        .        .        .        .        .        .        .
408450. .        .        .   X C  .  W E   .        .        .        .        .        .        .        .
428550. .        .        .   XXXX .  W E   .        .        .        .        .        .        .        .
448650. .        .        .      X .  W E   .        .        .        .        .        .        .        .
468750. .        .        .      XXXXXX E   .        .        .        .        .        .        .        .
518850. .        .        . X    XXXXXXXX   .        .        .        .        .        .        .        .
538950. .        .        . X  C  .  W E   .        .        .        .        .        .        .        .
559050. .        .       XXXX  C  .  W E   .        .        .        .        .        .        .        .
579150. .        .      X .    C  .  W E   .        .        .        .        .        .        .        .
599250. .        .      X .    C  .  W E   .        .        .        .        .        .        .        .
619350. .        .        . X  C  .  W E   .        .        .        .        .        .        .    BANK.
649450. XXXXXXXXXXXXXXX   .    C  .  W E   .        .        .        .        .        .        .        .
669550. XXXX     .        .    C  .  W E   .        .        .        .        .        .        .        .
699650. .  XXXXXX .       .    C  .  W E   .        .        .        .        .        .        .        .
709750. .        X        .    C  .  W E   .        .        .        .        .        .        .        .
729850. .        X        .    C  .  W E   .        .        .        .        .        .        .        .
749950. .        X        .    C  .  W E   .        .        .        .        .        .        .        .
77***** .      XXX        .    C  .  W E   .        .        .        .        .        .        .        .
79***** .        XXXX     .    C  .  W E   .        .        .        .        .        .        .        .
81***** .        .  X     .    C  .  W E   .        .        .        .        .        .        .        .
84***** .        .       XXXXXX C  .  W E   .        .        .        .        .        .        .        .
87***** .        .       XXXX   C  .  W E   .        .        .        .        .        .        .        .
90***** .        .        .        .        XXXXXXXXXXXXXXXXXX X        .        .        .        .    BANK.
91***** .        .        .        .        .  X     .        .        .        .        .        .        .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1092.00	6497.00	1096.00	6546.00	1099.00	6600.00	1099.00	6658.00	1099.00	6703.00
1097.00	6762.00	1093.00	6814.00	1089.00	6868.00	1084.00	6920.00	1079.00	6967.00
1077.00	6997.00	1077.00	7019.00	1076.00	7031.00	1075.00	7073.00	1075.00	7142.00

1075.00	7215.00	1076.00	7287.00	1076.00	7359.00	1076.00	7427.00	1076.00	7496.00
1076.00	7571.00	1076.00	7637.00	1076.00	7708.00	1076.00	7780.00	1076.00	7841.00
1076.00	7902.00	1076.00	7918.00	1076.00	7952.00	1076.00	8021.00	1075.00	8057.00
1075.00	8132.00	1075.00	8187.00	1075.00	8237.00	1074.00	8279.00	1076.00	8320.00
1076.00	8373.00	1075.00	8421.00	1075.00	8448.00	1075.00	8498.00	1076.00	8543.00
1075.00	8587.00	1076.00	8638.00	1076.00	8695.00	1076.00	8749.00	1078.00	8797.00
1079.00	8838.00	1074.00	8849.00	1074.00	8859.00	1078.00	8877.00	1076.00	8895.00
1074.00	8933.00	1074.00	8982.00	1074.00	9038.00	1073.00	9055.00	1072.00	9119.00
1072.00	9173.00	1072.00	9224.00	1072.00	9281.00	1074.00	9342.00	1074.00	9373.00
1071.00	9409.00	1070.00	9430.00	1065.00	9471.00	1066.00	9503.00	1065.00	9549.00
1066.00	9610.00	1068.00	9624.00	1068.00	9698.00	1069.00	9754.00	1069.00	9819.00
1069.00	9878.00	1069.00	9940.00	1069.00	10000.00	1069.00	10010.00	1068.00	10044.00
1068.00	10097.00	1069.00	10145.00	1070.00	10198.00	1070.00	10259.00	1070.00	10295.00
1073.00	10309.00	1075.00	10362.00	1075.00	10393.00	1074.00	10414.00	1073.00	10444.00
1073.00	10490.00	1088.00	10524.00	1089.00	10539.00	1081.00	10574.00	1082.00	10618.00

```
CROSS SECTION     13.55
STREAM  AGUA FRIA RIVER
DISCHARGE=    99000.


PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV******    -9996.    -9992.    -9988.    -9984.    -9980.    -9976.    -9972.    -9968.    -9964.    -9960.


    STA-FEET

8560 XSEC POINT-X      EL,ST-   1110.00   6310.00
 26300. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1110.00   6370.00
8560 XSEC POINT-X      EL,ST-   1100.00   6388.00
8560 XSEC POINT-X      EL,ST-   1098.00   6427.00
 56400. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1091.00   6476.00
8560 XSEC POINT-X      EL,ST-   1089.00   6525.00
 76500. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1090.00   6560.00
8560 XSEC POINT-X      EL,ST-   1094.00   6589.00
8560 XSEC POINT-X      EL,ST-   1103.00   6620.00
8560 XSEC POINT-X      EL,ST-   1101.00   6649.00
116600. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1101.00   6710.00
126700. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1101.00   6773.00
8560 XSEC POINT-X      EL,ST-   1100.00   6839.00
146800. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1099.00   6889.00
8560 XSEC POINT-X      EL,ST-   1094.00   6933.00
166900. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   6975.00
8560 XSEC POINT-X      EL,ST-   1080.00   7019.00
187000. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   7070.00
8560 XSEC POINT-X      EL,ST-   1081.00   7128.00
8560 XSEC POINT-X      EL,ST-   1079.00   7148.00
217100. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1080.00   7171.00
8560 XSEC POINT-X      EL,ST-   1080.00   7240.00
237200. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1080.00   7305.00
247300. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   7366.00
8560 XSEC POINT-X      EL,ST-   1079.00   7379.00
8560 XSEC POINT-X      EL,ST-   1081.00   7411.00
277400. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   7473.00
8560 XSEC POINT-X      EL,ST-   1081.00   7536.00
297500. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   7600.00
307600. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   7668.00
8560 XSEC POINT-X      EL,ST-   1079.00   7721.00
8560 XSEC POINT-X      EL,ST-   1080.00   7740.00
337700. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   7812.00
347800. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1081.00   7899.00
```

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357900. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1081.00   7966.00
8560 XSEC POINT-X      EL,ST-   1081.00   8022.00
378000. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1080.00   8067.00
8560 XSEC POINT-X      EL,ST-   1077.00   8085.00
8560 XSEC POINT-X      EL,ST-   1079.00   8110.00
8560 XSEC POINT-X      EL,ST-   1079.00   8134.00
8560 XSEC POINT-X      EL,ST-   1072.00   8150.00
428100. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1070.00   8188.00
8560 XSEC POINT-X      EL,ST-   1071.00   8236.00
448200. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1075.00   8266.00
8560 XSEC POINT-X      EL,ST-   1076.00   8308.00
8560 XSEC POINT-X      EL,ST-   1071.00   8331.00
478300. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1073.00   8361.00
8560 XSEC POINT-X      EL,ST-   1075.00   8390.00
8560 XSEC POINT-X      EL,ST-   1075.00   8448.00
508400. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1077.00   8518.00
518500. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1077.00   8597.00
528600. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1076.00   8676.00
8560 XSEC POINT-X      EL,ST-   1076.00   8735.00
548700. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1077.00   8805.00
558800. .          .          .          .          .          .          .          .          .          .          BANKX
8560 XSEC POINT-X      EL,ST-   1076.00   8870.00
8560 XSEC POINT-X      EL,ST-   1076.00   8923.00
8560 XSEC POINT-X      EL,ST-   1071.00   8949.00
588900. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1071.00   9001.00
599000. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1071.00   9060.00
8560 XSEC POINT-X      EL,ST-   1070.00   9109.00
619100. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1069.00   9170.00
8560 XSEC POINT-X      EL,ST-   1070.00   9236.00
639200. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1069.00   9293.00
8560 XSEC POINT-X      EL,ST-   1071.00   9337.00
659300. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1072.00   9397.00
669400. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1073.00   9454.00
8560 XSEC POINT-X      EL,ST-   1073.00   9512.00
689500. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1073.00   9581.00
699600. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1074.00   9656.00
8560 XSEC POINT-X      EL,ST-   1074.00   9719.00
719700. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1074.00   9778.00
8560 XSEC POINT-X      EL,ST-   1074.00   9846.00
739800. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1074.00   9899.00
749900. .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1073.00  10000.00
75***** .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1069.00  10068.00
8560 XSEC POINT-X      EL,ST-   1068.00  10114.00
77***** .          .          .          .          .          .          .          .          .          .          X
8560 XSEC POINT-X      EL,ST-   1070.00  10175.00
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8560 XSEC POINT-X      EL,ST-   1069.00  10234.00
79***** .        .        .        .        .        .        .        .        .        .        .        X
8560 XSEC POINT-X      EL,ST-   1069.00  10300.00
8560 XSEC POINT-X      EL,ST-   1069.00  10344.00
81***** .        .        .        .        .        .        .        .        .        .        .        X
8560 XSEC POINT-X      EL,ST-   1069.00  10398.00
8560 XSEC POINT-X      EL,ST-   1067.00  10428.00
83***** .        .        .        .        .        .        .        .        .        .        .        X
8560 XSEC POINT-X      EL,ST-   1068.00  10519.00
86***** .        .        .        .        .        .        .        .        .        .        .     BANKX
 10600. .        .        .        .        .        .        .        .        .        .        .        X
 10700. .        .        .        .        .        .        .        .        .        .        .        X
88***** .        .        .        .        .        .        .        .        .        .        .        X
91***** .        .        .        .        .        .        .        .        .        .        .        X

NRD=       0 ELLC=  9999999.00 ELTRD=  9999999.00

 EL(I),STA(I)
   1110.00     6310.00     1110.00     6370.00     1100.00     6388.00     1098.00     6427.00     1091.00     6476.00
   1089.00     6525.00     1090.00     6560.00     1094.00     6589.00     1103.00     6620.00     1101.00     6649.00
   1101.00     6710.00     1101.00     6773.00     1100.00     6839.00     1099.00     6889.00     1094.00     6933.00
   1081.00     6975.00     1080.00     7019.00     1081.00     7070.00     1081.00     7128.00     1079.00     7148.00
   1080.00     7171.00     1080.00     7240.00     1080.00     7305.00     1081.00     7366.00     1079.00     7379.00
   1081.00     7411.00     1081.00     7473.00     1081.00     7536.00     1081.00     7600.00     1081.00     7668.00
   1079.00     7721.00     1080.00     7740.00     1081.00     7812.00     1081.00     7899.00     1081.00     7966.00
   1081.00     8022.00     1080.00     8067.00     1077.00     8085.00     1079.00     8110.00     1079.00     8134.00
   1072.00     8150.00     1070.00     8188.00     1071.00     8236.00     1075.00     8266.00     1076.00     8308.00
   1071.00     8331.00     1073.00     8361.00     1075.00     8390.00     1075.00     8448.00     1077.00     8518.00
   1077.00     8597.00     1076.00     8676.00     1076.00     8735.00     1077.00     8805.00     1076.00     8870.00
   1076.00     8923.00     1071.00     8949.00     1071.00     9001.00     1071.00     9060.00     1070.00     9109.00
   1069.00     9170.00     1070.00     9236.00     1069.00     9293.00     1071.00     9337.00     1072.00     9397.00
   1073.00     9454.00     1073.00     9512.00     1073.00     9581.00     1074.00     9656.00     1074.00     9719.00
   1074.00     9778.00     1074.00     9846.00     1074.00     9899.00     1073.00    10000.00     1069.00    10068.00
   1068.00    10114.00     1070.00    10175.00     1069.00    10234.00     1069.00    10300.00     1069.00    10344.00
   1069.00    10398.00     1067.00    10428.00     1068.00    10519.00   100000.00    10540.00   100000.00    10541.00
 100000.00    10835.00   100000.00    10836.00   100000.00    10876.00   100000.00    10919.00   100000.00    10940.00
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CROSS SECTION     13.74
STREAM  AGUA FRIA RIVER
DISCHARGE=   100000.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV 1070.    1074.     1078.     1082.     1086.     1090.     1094.     1098.     1102.     1106.     1110.

    STA-FEET

  26750. .         .         .                   .         .         .         .       X .         .         .         .
  76850. .         .         .         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    X .       X .         .         .
  96950. .         .         .         XXXX E    .         .         .         .         .         .         .         .
 137050. .         .         .              XXXX .         .         .         .         .         .         .         .
 167150. .         .         .                 X .         .         .         .         .         .         .         .
 187250. .         .         .            XXXXXX .         .         .         .         .         .         .         .
 237350. .         .         X    XXXXXXXXX E    .         .         .         .         .         .         .         .
 257450. .         .         .         XXXXXX    .         .         .         .         .         .         .         .
 287550. .         .         .              XXXX .         .         .         .         .         .         .         .
 317650. .         .         .       XXX    E    .         .         .         .         .         .         .         .
 337750. .         .         .         XXXX E    .         .         .         .         .         .         .         .
 377850. .         .         .  X      XXXX E    .         .         .         .         .         .         .         .
 407950. .         .         XXXXXXXXXXX    E    .         .         .         .         .         .         .         .
 428050. .         .         .    XXXX W    E    .         .         .         .         .         .         .         .
 448150. .         .         .         XXXX E    .         .         .         .         .         .         .         .
 468250. .         .         .         X    E    .         .         .         .         .         .         .         .
   8350. .         .         .         X    E    .         .         .         .         .         .         .         .
   8450. .         .         .         X    E    .         .         .         .         .         .         .         .
 488550. .         .         .       XXX    E    .         .         .         .         .         .         .         .
 498650. .         .         .       X W    E    .         .         .         .         .         .         .         .
 528750. .         .         .    XXXX W    E    .         .         .         .         .         .         .         .
 538850. .         .         .       X W    E    .         .         .         .         .         .         .         .
 568950. .         .         .  XXXXXX W    E    .         .         .         .         .         .         .         .
 599050. .         .         .  XXXXXX W    E    .         .         .         .         .         .         .         .
 619150. .         .         .       XXX    E    .         .         .         .         .         .         .         .
 649250. .         .    XXXXXXXXXXXXXX W    E    .         .         .         .         .         .         .     BANK.
 669350. .         .       X .         W    E    .         .         .         .         .         .         .         .
 689450. .         .       XXX         W    E    .         .         .         .         .         .         .         .
 699550. .         .         X         W    E    .         .         .         .         .         .         .         .
 719650. .         .         X         W    E    .         .         .         .         .         .         .         .
 729750. .         .         X         W    E    .         .         .         .         .         .         .         .
 759850. .         XXXXXXXXX .         W    E    .         .         .         .         .         .         .         .
 779950. .         .     X   .         W    E    .         .         .         .         .         .         .         .
 78***** .         .     X   .         W    E    .         .         .         .         .         .         .         .
 81***** .         .  XXXXXXXXXXXXX    W    E    .         .         .         .         .         .         .         .
 82***** .         .         .   X     W    E    .         .         .         .         .         .         .         .
 86***** .       XXXXXXXXXXXXXXXX      W    E    .         .         .         .         .         .         .         .
 88***** .       XXXXXXXX    .         W    E    .         .         .         .         .         .         .         .
 89***** .         .       X .         W    E    .         .         .         .         .         .         .         .
 92***** .       XXXXXXXX    .         W    E    .         .         .         .         .         .         .         .
 95***** .         .       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX .         .         .         .         .         .     BANK.
 96***** .         .         .                   .         X         .         .         .         .         .         .

NRD=       0 ELLC=  9999999.00 ELTRD=  9999999.00
```

EL(I),STA(I)

1101.00	6777.00	1099.00	6806.00	1101.00	6828.00	1105.00	6848.00	1084.00	6888.00
1082.00	6899.00	1082.00	6928.00	1083.00	6979.00	1084.00	7009.00	1084.00	7052.00
1085.00	7072.00	1085.00	7092.00	1085.00	7131.00	1085.00	7155.00	1085.00	7188.00
1085.00	7222.00	1083.00	7268.00	1083.00	7301.00	1082.00	7344.00	1078.00	7356.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1078.00	7368.00	1080.00	7396.00	1082.00	7430.00	1084.00	7468.00	1084.00	7509.00
1084.00	7545.00	1085.00	7589.00	1081.00	7605.00	1081.00	7644.00	1082.00	7679.00
1082.00	7724.00	1083.00	7772.00	1083.00	7818.00	1079.00	7836.00	1079.00	7847.00
1082.00	7876.00	1082.00	7921.00	1082.00	7968.00	1078.00	7997.00	1080.00	8028.00
1081.00	8069.00	1083.00	8111.00	1082.00	8154.00	1082.00	8209.00	1082.00	8261.00
1082.00	8536.00	1081.00	8592.00	1081.00	8657.00	1080.00	8724.00	1081.00	8763.00
1081.00	8795.00	1081.00	8856.00	1081.00	8917.00	1079.00	8956.00	1079.00	8969.00
1079.00	9016.00	1080.00	9059.00	1081.00	9081.00	1082.00	9118.00	1081.00	9165.00
1081.00	9209.00	1076.00	9229.00	1076.00	9266.00	1077.00	9314.00	1077.00	9375.00
1077.00	9435.00	1078.00	9498.00	1078.00	9563.00	1078.00	9627.00	1078.00	9685.00
1078.00	9744.00	1077.00	9801.00	1074.00	9837.00	1074.00	9889.00	1076.00	9949.00
1076.00	10000.00	1076.00	10062.00	1075.00	10126.00	1078.00	10148.00	1080.00	10180.00
1079.00	10241.00	1079.00	10302.00	1076.00	10324.00	1076.00	10375.00	1073.00	10396.00
1073.00	10460.00	1076.00	10500.00	1077.00	10551.00	1076.00	10608.00	1074.00	10649.00
1073.00	10681.00	1077.00	10708.00	1086.00	10739.00	1089.00	10786.00	1090.00	10835.00

CROSS SECTION 13.93
STREAM AGUA FRIA RIVER
DISCHARGE= 100000.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

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ELEV 1074.    1078.    1082.    1086.    1090.    1094.    1098.    1102.    1106.    1110.    1114.


   STA-FEET

 36500. .        .        .        XXXXXX   .        .        .        .        .        .        .        .
 66600. .        .        .    X  XXX W E   .        .        .        .        .        .        .        .
 86700. .        .        .  XXXXXXXX W E   .        .        .        .        .        .        .        .
116800. .        .        .  XXXXXX . W E   .        .        .        .        .        .        .        .
136900. .        .        .        X W E   .        .        .        .        .        .        .        .
167000. .        .        .      X X W E   .        .        .        .        .        .        .        .
187100. .        .        .        .  XXX   .        .        .        .        .        .        .        .
217200. .        .        .      XXXXXXXX   .        .        .        .        .        .        .        .
247300. .        .        XXXXXXXXX . W E   .        .        .        .        .        .        .        .
287400. .        .        .  XXXXXXXX W E   .        .        .        .        .        .        .        .
307500. .        .        .      XXX W E   .        .        .        .        .        .        .        .
327600. .        .        .      XXX W E   .        .        .        .        .        .        .        .
347700. .        .        .        X W E   .        .        .        .        .        .        .        .
367800. .        .        .      XXX W E   .        .        .        .        .        .        .        .
387900. .        .        .      X . W E   .        .        .        .        .        .        .        .
398000. .        .        .        X W E   .        .        .        .        .        .        .        .
408100. .        .        .        X W E   .        .        .        .        .        .        .        .
428200. .        .        .    XXXX . W E   .        .        .        .        .        .        .        .
448300. .        .        .  X  C   . W E   .        .        .        .        .        .        .        .
468400. .        .    XXXX .     C   . W E   .        .        .        .        .        .        .        .
  8500. .        .    X    .     C   . W E   .        .        .        .        .        .        .        .
488600. .        .    XXXXXXXXX  C   . W E   .        .        .        .        .        .        .        .
508700. .        .        XXXX  C   . W E   .        .        .        .        .        .        .        .
518800. .        .        .  X  C   . W E   .        .        .        .        .        .        .        .
558900. .        .  X X   .  XXXC   . W E   .        .        .        .        .        .        .        .
579000. .        .        .    XC   . W E   .        .        .        .        .        .        .        .
589100. .        .        .    XC   . W E   .        .        .        .        .        .        .        .
599200. .        .        .    XC   . W E   .        .        .        .        .        .        .        .
619300. .        .        .  XXXC   . W E   .        .        .        .        .        .        .        .
649400. .        .  X XXXXXXXXX  C   . W E   .        .        .        .        .        .        .   BANK.
659500. .        .    X    .     C   . W E   .        .        .        .        .        .        .        .
679600. .        .    X    .     C   . W E   .        .        .        .        .        .        .        .
699700. .  XXXXXXXXXXX     .     C   . W E   .        .        .        .        .        .        .        .
719800. .  XXXXXX .        .     C   . W E   .        .        .        .        .        .        .        .
739900. .        XXXX      .     C   . W E   .        .        .        .        .        .        .        .
75***** .      X .         .     C   . W E   .        .        .        .        .        .        .        .
76***** .      X .         .     C   . W E   .        .        .        .        .        .        .        .
78***** .        X         .     C   . W E   .        .        .        .        .        .        .        .
80***** .        .  XXX    .     C   . W E   .        .        .        .        .        .        .        .
82***** .        .    X    .     C   . W E   .        .        .        .        .        .        .        .
84***** .        .  XXX    .     C   . W E   .        .        .        .        .        .        .        .
88***** .        XXXXXXXXXXXXXXXXXX . W E   .        .        .        .        .        .        .   BANK.
90***** .        .        .      X . W E   .        .        .        .        .        .        .        .
92***** .        .        .      XXX W E   .        .        .        .        .        .        .        .
94***** .        .        .        .       XXXXXX   .        .        .        .        .        .        .
96***** .        .        .        .       X        .        .        .        .        .        .        .

NRD=      0 ELLC=  9999999.00 ELTRD=  9999999.00

  EL(I),STA(I)
```

1086.00	6518.00	1086.00	6548.00	1085.00	6585.00	1084.00	6624.00	1086.00	6648.00
1086.00	6682.00	1083.00	6720.00	1083.00	6760.00	1083.00	6808.00	1085.00	6845.00
1086.00	6895.00	1086.00	6932.00	1086.00	6986.00	1085.00	7023.00	1086.00	7039.00
1087.00	7080.00	1088.00	7117.00	1088.00	7170.00	1088.00	7224.00	1085.00	7240.00
1085.00	7279.00	1084.00	7321.00	1082.00	7341.00	1083.00	7355.00	1085.00	7372.00
1086.00	7390.00	1086.00	7435.00	1086.00	7494.00	1085.00	7544.00	1085.00	7585.00
1086.00	7627.00	1086.00	7676.00	1086.00	7725.00	1086.00	7774.00	1085.00	7818.00
1085.00	7861.00	1085.00	7921.00	1086.00	7976.00	1086.00	8137.00	1085.00	8191.00
1084.00	8241.00	1083.00	8287.00	1083.00	8331.00	1081.00	8379.00	1080.00	8400.00
1080.00	8587.00	1083.00	8636.00	1083.00	8687.00	1082.00	8749.00	1083.00	8811.00
1083.00	8868.00	1079.00	8895.00	1080.00	8919.00	1084.00	8932.00	1084.00	8980.00
1084.00	9034.00	1084.00	9107.00	1084.00	9171.00	1084.00	9260.00	1083.00	9331.00
1083.00	9377.00	1079.00	9386.00	1080.00	9435.00	1080.00	9500.00	1080.00	9578.00
1080.00	9643.00	1079.00	9680.00	1075.00	9696.00	1075.00	9760.00	1077.00	9838.00
1079.00	9890.00	1078.00	9939.00	1077.00	10000.00	1077.00	10050.00	1077.00	10110.00
1078.00	10167.00	1078.00	10230.00	1079.00	10289.00	1080.00	10322.00	1080.00	10357.00
1080.00	10412.00	1080.00	10465.00	1079.00	10502.00	1078.00	10558.00	1080.00	10588.00
1085.00	10619.00	1085.00	10640.00	1085.00	10696.00	1085.00	10739.00	1085.00	10786.00
1086.00	10839.00	1090.00	10880.00	1092.00	10936.00	1090.00	10978.00	1090.00	11001.00

CROSS SECTION 14.12
STREAM AGUA FRIA RIVER
DISCHARGE= 101000.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1080.    1084.    1088.    1092.    1096.    1100.    1104.    1108.    1112.    1116.    1120.


   STA-FEET

 26100. .        .        .        .        .        .        .        .        .X       .        .        .
 46200. .        .        .        .        . XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX        .        .
 86300. .        X      XXXXXXE    .        .        .        .        .        .        .        .        .
 96400. .        .      XC.  WE    .        .        .        .        .        .        .        .        .
116500. .        .   XXXXC.  WE    .        .        .        .        .        .        .        .        .
136600. .        .   X  C.  WE    .        .        .        .        .        .        .        .        .
156700. .        XXXX   C.  WE    .        .        .        .        .        .        .        .        .
166800. .        X      C.  WE    .        .        .        .        .        .        .        .        .
186900. .   XXXX .      C.  WE    .        .        .        .        .        .        .        .        .
197000. . X      .      C.  WE    .        .        .        .        .        .        .        .        .
237100. . XXXXXXXXXXXX   .      X .        .        .        .        .        .        .        .        .
247200. .        .   X  C.  WE    .        .        .        .        .        .        .        .        .
267300. .        .      XC.  WE    .        .        .        .        .        .        .        .        .
277400. .        .   X  C.  WE    .        .        .        .        .        .        .        .        .
297500. .        .      XC.  WE    .        .        .        .        .        .        .        .        .
317600. .        .      XXX  WE    .        .        .        .        .        .        .        .        .
347700. .        X  XXXXXXC.  WE    .        .        .        .        .        .        .        .        .
357800. .        . X    C.  WE    .        .        .        .        .        .        .        .        .
377900. .        . X    C.  WE    .        .        .        .        .        .        .        .        .
398000. .        . X    C.  WE    .        .        .        .        .        .        .        .        .
418100. .        .   XXXXXX  WE    .        .        .        .        .        .        .        .        .
438200. .        .      XC.  WE    .        .        .        .        .        .        .        .        .
448300. .        .        X  WE    .        .        .        .        .        .        .        .        .
468400. .        .      XXX  WE    .        .        .        .        .        .        .        .        .
488500. .        .      XC.  WE    .        .        .        .        .        .        .        .        .
498600. .        .      XC.  WE    .        .        .        .        .        .        .        .        .
518700. .        .   XXXXC.  WE    .        .        .        .        .        .        .        .        .
538800. .        .   X  C.  WE    .        .        .        .        .        .        .        .        .
548900. .        . X    C.  WE    .        .        .        .        .        .        .        .        .
569000. .        . XXXXXXC.  WE    .        .        .        .        .        .        .        .        .
589100. .        .      XXX  WE    .        .        .        .        .        .        .        .        .
599200. .        .        X  WE    .        .        .        .        .        .        .        .        .
619300. .        .        .   XXXX .        .        .        .        .        .        .        .        .
629400. .        .        .      X .        .        .        .        .        .        .        .        .
649500. XXXXXXXXXXXXXXXXXXXXXXXXXXXX .        .        .        .        .        .        .        .  BANK.
669600. X        .      C.  WE    .        .        .        .        .        .        .        .        .
689700. . XXX    .      C.  WE    .        .        .        .        .        .        .        .        .
709800. .   X    .      C.  WE    .        .        .        .        .        .        .        .        .
729900. .        X      C.  WE    .        .        .        .        .        .        .        .        .
75***** .        X      C.  WE    .        .        .        .        .        .        .        .        .
77***** .        X      C.  WE    .        .        .        .        .        .        .        .        .
79***** .        X      C.  WE    .        .        .        .        .        .        .        .        .
81***** .      XXX      C.  WE    .        .        .        .        .        .        .        .        .
84***** . X XXXX .      C.  WE    .        .        .        .        .        .        .        .        .
88***** . XXXXXXX   X  C.  WE    .        .        .        .        .        .        .        .        .
91***** .        XXXXXX XC.  WE    .        .        .        .        .        .        .        .        .
94***** .        XXXXXXXXXXXXXXXXX .        .        .        .        .        .        .        .  BANK.
96***** .        .        .      X .        .        .        .        .        .        .        .        .

NRD=      0 ELLC=  9999999.00 ELTRD=  9999999.00
```

EL(I),STA(I)

1113.00	6146.00	1113.00	6182.00	1097.00	6217.00	1089.00	6254.00	1084.00	6289.00
1084.00	6315.00	1087.00	6333.00	1087.00	6397.00	1086.00	6463.00	1087.00	6527.00
1086.00	6580.00	1086.00	6631.00	1085.00	6684.00	1084.00	6743.00	1084.00	6805.00
1083.00	6873.00	1082.00	6946.00	1081.00	7011.00	1081.00	7061.00	1091.00	7076.00
1085.00	7094.00	1086.00	7142.00	1086.00	7194.00	1087.00	7271.00	1087.00	7340.00
1086.00	7400.00	1087.00	7459.00	1087.00	7526.00	1088.00	7575.00	1087.00	7632.00
1087.00	7670.00	1084.00	7692.00	1085.00	7736.00	1085.00	7792.00	1085.00	7858.00
1085.00	7927.00	1085.00	7992.00	1085.00	8047.00	1086.00	8088.00	1088.00	8128.00
1087.00	8175.00	1087.00	8224.00	1088.00	8287.00	1088.00	8353.00	1087.00	8421.00
1087.00	8491.00	1087.00	8542.00	1087.00	8603.00	1087.00	8664.00	1086.00	8723.00
1086.00	8786.00	1086.00	8846.00	1085.00	8893.00	1085.00	8953.00	1087.00	9000.00
1087.00	9061.00	1088.00	9134.00	1088.00	9208.00	1090.00	9273.00	1091.00	9330.00
1091.00	9403.00	1091.00	9458.00	1080.00	9486.00	1080.00	9552.00	1080.00	9614.00
1081.00	9662.00	1082.00	9714.00	1082.00	9780.00	1082.00	9839.00	1084.00	9878.00
1084.00	9920.00	1084.00	9973.00	1084.00	10000.00	1084.00	10027.00	1084.00	10071.00
1084.00	10110.00	1084.00	10171.00	1084.00	10232.00	1083.00	10290.00	1084.00	10334.00
1083.00	10369.00	1081.00	10392.00	1082.00	10426.00	1081.00	10479.00	1081.00	10510.00
1086.00	10531.00	1084.00	10549.00	1084.00	10566.00	1087.00	10580.00	1086.00	10629.00
1084.00	10671.00	1084.00	10695.00	1091.00	10715.00	1091.00	10764.00	1091.00	10789.00

CROSS SECTION 14.31
STREAM AGUA FRIA RIVER
DISCHARGE= 102500.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1080.    1084.    1088.    1092.    1096.    1100.    1104.    1108.    1112.    1116.    1120.


   STA-FEET

 26400. .        .        .                 .        .        .        .   X    .        .        .        .
 46500. .        .        .  XXX C  W E     .        .        .        .        .        .        .        .
 56600. .        .        .    X C  W E     .        .        .        .        .        .        .        .
 76700. .        .        .  XXXXXX W E     .        .        .        .        .        .        .        .
 96800. .        .        X      C  W E     .        .        .        .        .        .        .        .
126900. .        .      XXXXXXXXXXX W E     .        .        .        .        .        .        .        .
137000. .        .        .    X C  W E     .        .        .        .        .        .        .        .
157100. .        .        XXXX   C  W E     .        .        .        .        .        .        .        .
197200. .        .      X .  X      X E     .        .        .        .        .        .        .        .
207300. .        .        .  X   C  W E     .        .        .        .        .        .        .        .
227400. .        .        XXXX   C  W E     .        .        .        .        .        .        .        .
247500. .        .        .  X   C  W E     .        .        .        .        .        .        .        .
257600. .        .        .    X C  W E     .        .        .        .        .        .        .        .
277700. .        .        .    X C  W E     .        .        .        .        .        .        .        .
297800. .        .        .    X C  W E     .        .        .        .        .        .        .        .
307900. .        .        .    X C  W E     .        .        .        .        .        .        .        .
328000. .        .        .      X W E      .        .        .        .        .        .        .        .
348100. .        .        .    X C  W E     .        .        .        .        .        .        .        .
358200. .        .        .      X W E      .        .        .        .        .        .        .        .
378300. .        .        .    XXXX W E     .        .        .        .        .        .        .        .
408400. .        .      XXXXXXXX C  W E     .        .        .        .        .        .        .        .
418500. .        .        X      C  W E     .        .        .        .        .        .        .        .
448600. .        .      X XXXXXX C  W E     .        .        .        .        .        .        .        .
  8700. .        .        .    X C  W E     .        .        .        .        .        .        .        .
  8800. .        .        .    X C  W E     .        .        .        .        .        .        .        .
458900. .        .        .    X C  W E     .        .        .        .        .        .        .        .
469000. .        .        .      X W E      .        .        .        .        .        .        .        .
479100. .        .        .      X W E      .        .        .        .        .        .        .        .
499200. .        .        .    X C  W E     .        .        .        .        .        .        .        .
529300. .        .      X XXXX   C  W E     .        .        .        .        .        .        .        .
549400. .        .  XXXXXXXXXXXX C  W E     .        .        .        .        .        .        .   BANK.
579500. .   XXXX .        .      C  W E     .        .        .        .        .        .        .        .
599600. .        .   XXXX .      C  W E     .        .        .        .        .        .        .        .
619700. .       XXXX      .      C  W E     .        .        .        .        .        .        .        .
649800. .        .   XXXXXX      C  W E     .        .        .        .        .        .        .        .
669900. .        .      XXX      C  W E     .        .        .        .        .        .        .        .
69***** .        .        XXXX   C  W E     .        .        .        .        .        .        .        .
71***** .        .      X .      C  W E     .        .        .        .        .        .        .        .
73***** .        .      X .      C  W E     .        .        .        .        .        .        .        .
75***** .        . XXX    .      C  W E     .        .        .        .        .        .        .        .
77***** .       XXXXXX    .      C  W E     .        .        .        .        .        .        .        .
80***** . XXXXXX .        .      C  W E     .        .        .        .        .        .        .        .
83***** .     XXXXXXXXXXXXXXXXX C  W E     .        .        .        .        .        .        .   BANK.
84***** .        .        .  X   C  W E     .        .        .        .        .        .        .        .
86***** .        .        .  XXX C  W E     .        .        .        .        .        .        .        .
88***** .        .        .  X   C  W E     .        .        .        .        .        .        .        .
89***** .        .      X .      C  W E     .        .        .        .        .        .        .        .
91***** .        .      X .      C  W E     .        .        .        .        .        .        .        .
93***** .        .        X      C  W E     .        .        .        .        .        .        .        .
95***** .        .        XXXXXXXXXXXXX      .        .        .        .        .        .        .        .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1110.00	6427.00	1089.00	6477.00	1090.00	6541.00	1090.00	6598.00	1091.00	6661.00
1089.00	6725.00	1088.00	6771.00	1088.00	6830.00	1087.00	6855.00	1089.00	6881.00
1091.00	6944.00	1090.00	7011.00	1089.00	7082.00	1088.00	7125.00	1089.00	7161.00
1092.00	7193.00	1087.00	7216.00	1089.00	7249.00	1089.00	7314.00	1088.00	7367.00
1089.00	7419.00	1089.00	7451.00	1089.00	7514.00	1090.00	7586.00	1090.00	7654.00
1090.00	7712.00	1090.00	7778.00	1090.00	7839.00	1090.00	7911.00	1091.00	7980.00
1091.00	8043.00	1090.00	8104.00	1090.00	8140.00	1091.00	8201.00	1090.00	8254.00
1091.00	8313.00	1090.00	8354.00	1087.00	8370.00	1087.00	8431.00	1088.00	8491.00
1088.00	8558.00	1087.00	8602.00	1090.00	8623.00	1090.00	8919.00	1091.00	8976.00
1091.00	9099.00	1090.00	9162.00	1090.00	9221.00	1088.00	9266.00	1087.00	9303.00
1089.00	9345.00	1090.00	9387.00	1085.00	9427.00	1082.00	9459.00	1082.00	9517.00
1083.00	9550.00	1087.00	9582.00	1086.00	9646.00	1085.00	9701.00	1084.00	9726.00
1086.00	9764.00	1088.00	9800.00	1088.00	9844.00	1087.00	9894.00	1088.00	9923.00
1089.00	9951.00	1089.00	10000.00	1088.00	10032.00	1087.00	10066.00	1087.00	10102.00
1087.00	10161.00	1087.00	10213.00	1086.00	10266.00	1085.00	10303.00	1086.00	10353.00
1084.00	10393.00	1083.00	10451.00	1083.00	10503.00	1081.00	10531.00	1083.00	10572.00
1086.00	10614.00	1090.00	10648.00	1089.00	10707.00	1089.00	10767.00	1090.00	10821.00
1089.00	10882.00	1089.00	10945.00	1087.00	10998.00	1087.00	11067.00	1087.00	11131.00
1088.00	11179.00	1088.00	11242.00	1088.00	11309.00	1093.00	11343.00	1094.00	11406.00

```
CROSS SECTION     14.50
STREAM  AGUA FRIA RIVER
DISCHARGE=   102500.


PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV 1080.     1084.     1088.     1092.     1096.     1100.     1104.     1108.     1112.     1116.     1120.


    STA-FEET

 27100. .         .         .         .                   .         .         .         .         X         .         .
 57200. .         .         .         .                   .         .         .         .         .  XXXXXXXXXXX      .
 87300. .         .         .         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      .
 97400. .         .         .         X       CWE         .         .         .         .         .         .         .
107500. .         .         .         .  X    CWE         .         .         .         .         .         .         .
127600. .         .         .         .  X    CWE         .         .         .         .         .         .         .
157700. .         .         .    X  XXXXXX    CWE         .         .         .         .         .         .         .
177800. .         .         .         .  X    CWE         .         .         .         .         .         .         .
197900. .         .         .         .    X  CWE         .         .         .         .         .         .         .
208000. .         .         .         .    X  CWE         .         .         .         .         .         .         .
228100. .         .         .         .    X  CWE         .         .         .         .         .         .         .
238200. .         .         .         .    X  CWE         .         .         .         .         .         .         .
258300. .         .         .         .  X    CWE         .         .         .         .         .         .         .
278400. .         .         .       XXXXXX    CWE         .         .         .         .         .         .         .
298500. .         .         .         .  XXX  CWE         .         .         .         .         .         .         .
318600. .         .         .       X .       CWE         .         .         .         .         .         .         .
348700. .         .         .  XXXXXXXX       CWE         .         .         .         .         .         .         .
368800. .         .         .         .  X    CWE         .         .         .         .         .         .         .
388900. .         .         .         .    X  CWE         .         .         .         .         .         .         .
409000. .         .         .        XXXXXXXXXXWE         .         .         .         .         .         .         .
439100. .         .         .    XXXXXXXXX    CWE         .         .         .         .         .         .         .
459200. .         .         .         X       CWE         .         .         .         .         .         .         .
469300. .         .         .         .    X  CWE         .         .         .         .         .         .         .
489400. .         .         .         .    X  CWE         .         .         .         .         .         .         .
509500. .         .         .       XXXXXXXXXXXWE         .         .         .         .         .         .     BANK.
529600. .         .         .       X .       CWE         .         .         .         .         .         .         .
539700. .         .         .       X .       CWE         .         .         .         .         .         .         .
559800. .         .         .       X .       CWE         .         .         .         .         .         .         .
579900. .         .         .       X .       CWE         .         .         .         .         .         .         .
59***** .         .         X         .       CWE         .         .         .         .         .         .         .
61***** .         .         XXXX      .       CWE         .         .         .         .         .         .         .
63***** .         .  XXXXXXXXXXX      .       CWE         .         .         .         .         .         .         .
65***** .         .  X      .         .       CWE         .         .         .         .         .         .         .
67***** .         XXXX      .         .       CWE         .         .         .         .         .         .         .
69***** .         .         .  X      .       CWE         .         .         .         .         .         .         .
71***** .         .         .  XXX    .       CWE         .         .         .         .         .         .     BANK.
72***** .         .         .  X      .       CWE         .         .         .         .         .         .         .
74***** .         .         .  X      .       CWE         .         .         .         .         .         .         .
76***** .         .         .  X      .       CWE         .         .         .         .         .         .         .
79***** .         .         .        XXXXXXXXXXWE         .         .         .         .         .         .         .
80***** .         .         .         .  X    CWE         .         .         .         .         .         .         .
82***** .         .         .         .    X  CWE         .         .         .         .         .         .         .
83***** .         .         .         .    X  CWE         .         .         .         .         .         .         .
85***** .         .         .         .       XXX         .         .         .         .         .         .         .
86***** .         .         .         .            X      .         .         .         .         .         .         .
88***** .         .         .         .            X      .         .         .         .         .         .         .
90***** .         .         .         .            X      .         .         .         .         .         .         .
92***** .         .         .         .            X      .         .         .         .         .         .         .
95***** .         .         .         .            X      .         .         .         .         .         .         .
96***** .         .         .         .                   .  X      .         .         .         .         .         .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1116.00	7112.00	1117.00	7160.00	1117.00	7191.00	1121.00	7218.00	1121.00	7261.00
1106.00	7304.00	1092.00	7347.00	1092.00	7404.00	1093.00	7478.00	1093.00	7553.00
1093.00	7626.00	1091.00	7653.00	1090.00	7678.00	1093.00	7694.00	1093.00	7766.00
1093.00	7812.00	1094.00	7871.00	1094.00	7943.00	1094.00	8002.00	1094.00	8062.00
1094.00	8133.00	1094.00	8203.00	1093.00	8277.00	1093.00	8333.00	1093.00	8406.00
1091.00	8450.00	1094.00	8469.00	1093.00	8518.00	1091.00	8572.00	1091.00	8611.00
1089.00	8653.00	1089.00	8682.00	1092.00	8709.00	1093.00	8778.00	1093.00	8839.00
1094.00	8891.00	1094.00	8940.00	1095.00	9000.00	1092.00	9035.00	1093.00	9090.00
1092.00	9131.00	1090.00	9144.00	1092.00	9183.00	1092.00	9247.00	1094.00	9309.00
1094.00	9372.00	1094.00	9423.00	1095.00	9470.00	1091.00	9489.00	1091.00	9553.00
1091.00	9623.00	1091.00	9687.00	1091.00	9753.00	1091.00	9812.00	1091.00	9873.00
1091.00	9916.00	1088.00	9971.00	1088.00	10000.00	1088.00	10053.00	1089.00	10101.00
1089.00	10152.00	1085.00	10206.00	1085.00	10273.00	1085.00	10329.00	1084.00	10382.00
1085.00	10409.00	1089.00	10460.00	1089.00	10526.00	1090.00	10585.00	1089.00	10611.00
1089.00	10680.00	1089.00	10756.00	1089.00	10824.00	1089.00	10893.00	1089.00	10939.00
1095.00	10952.00	1092.00	10970.00	1092.00	11034.00	1093.00	11092.00	1094.00	11159.00
1094.00	11223.00	1094.00	11290.00	1095.00	11357.00	1096.00	11431.00	1097.00	11504.00
1097.00	11581.00	1097.00	11622.00	1097.00	11654.00	1097.00	11721.00	1097.00	11783.00
1097.00	11843.00	1097.00	11863.00	1097.00	11901.00	1097.00	11936.00	1101.00	11952.00

CROSS SECTION 14.69
STREAM AGUA FRIA RIVER
DISCHARGE= 102500.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

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ELEV 1085.     1089.     1093.     1097.     1101.     1105.     1109.     1113.     1117.     1121.     1125.


    STA-FEET

 37900. .         .         .         .         .         .         .         .         .       XXX         .         .
 48000. .         .         .         .         .         .         .         .         .         .  X      .         .
 78100. .         .         .         .         .         .         .         .         .         .    XXXX .         .
 98200. .         .         .         .  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      .         .         .         .
138300. .         .         .       XXXXXX W E  .         .         .         .         .         .         .         .
158400. .         .         .       X .C   W E  .         .         .         .         .         .         .         .
198500. .         .         .    X    XXXX W E  .         .         .         .         .         .         .         .
228600. .         .         .         .  X W E  .         .         .         .         .         .         .         .
248700. .         .         .       XXXXXX W E  .         .         .         .         .         .         .         .
278800. .         .         XXXX      .C   W E  .         .         .         .         .         .         .         .
298900. .         .         XXXX      .C   W E  .         .         .         .         .         .         .         .
319000. .         .       X .         .C   W E  .         .         .         .         .         .         .         .
339100. .         .         .  XXX    .C   W E  .         .         .         .         .         .         .         .
359200. .         .         .       X .C   W E  .         .         .         .         .         .         .         .
369300. .         .         .       X .C   W E  .         .         .         .         .         .         .         .
389400. .         .         .       X .C   W E  .         .         .         .         .         .         .         .
409500. .         .         .       XXXC   W E  .         .         .         .         .         .         .     BANK.
429600. .         .         .    XXXX .C   W E  .         .         .         .         .         .         .         .
449700. .         .         .  XXX    .C   W E  .         .         .         .         .         .         .         .
469800. .         .    XXXXXX         .C   W E  .         .         .         .         .         .         .         .
489900. .         .    X    .         .C   W E  .         .         .         .         .         .         .         .
50***** .         X         .         .C   W E  .         .         .         .         .         .         .         .
52***** .       XXX         .         .C   W E  .         .         .         .         .         .         .         .
53***** .         X         .         .C   W E  .         .         .         .         .         .         .         .
55***** .         X         .         .C   W E  .         .         .         .         .         .         .         .
57***** .         .    XXXX .         .C   W E  .         .         .         .         .         .         .         .
59***** .         .         XXXX      .C   W E  .         .         .         .         .         .         .     BANK.
60***** .         .         .  X      .C   W E  .         .         .         .         .         .         .         .
61***** .         .         .  X      .C   W E  .         .         .         .         .         .         .         .
63***** .         .         .  X      .C   W E  .         .         .         .         .         .         .         .
64***** .         .         .  X      .C   W E  .         .         .         .         .         .         .         .
66***** .         .         .  X      .C   W E  .         .         .         .         .         .         .         .
68***** .         .         .       X .C   W E  .         .         .         .         .         .         .         .
69***** .         .         .         XC   W E  .         .         .         .         .         .         .         .
71***** .         .         .         XC   W E  .         .         .         .         .         .         .         .
72***** .         .         .         .  X W E  .         .         .         .         .         .         .         .
73***** .         .         .         .  X W E  .         .         .         .         .         .         .         .
74***** .         .         .         .  X W E  .         .         .         .         .         .         .         .
76***** .         .         .         .    X E  .         .         .         .         .         .         .         .
77***** .         .         .         .    X E  .         .         .         .         .         .         .         .
79***** .         .         .         .    X E  .         .         .         .         .         .         .         .
80***** .         .         .         .    X E  .         .         .         .         .         .         .         .
81***** .         .         .         .    X E  .         .         .         .         .         .         .         .
82***** .         .         .         .    X E  .         .         .         .         .         .         .         .
84***** .         .         .         .       XXX         .         .         .         .         .         .         .
85***** .         .         .         .         X         .         .         .         .         .         .         .
87***** .         .         .         .         XXXXXX    .         .         .         .         .         .         .
89***** .         .         .         .         .    X    .         .         .         .         .         .         .
90***** .         .         .         .         .    X    .         .         .         .         .         .         .
91***** .         .         .         .         .    X    .         .         .         .         .         .         .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1120.00	7915.00	1121.00	7949.00	1122.00	8000.00	1123.00	8051.00	1123.00	8094.00
1124.00	8133.00	1114.00	8165.00	1098.00	8200.00	1098.00	8252.00	1096.00	8273.00
1096.00	8322.00	1096.00	8346.00	1096.00	8389.00	1096.00	8443.00	1097.00	8454.00
1095.00	8463.00	1095.00	8495.00	1098.00	8510.00	1098.00	8560.00	1098.00	8595.00
1098.00	8649.00	1098.00	8697.00	1096.00	8733.00	1093.00	8751.00	1094.00	8786.00
1094.00	8832.00	1094.00	8884.00	1093.00	8929.00	1092.00	8976.00	1092.00	9000.00
1094.00	9084.00	1095.00	9132.00	1096.00	9181.00	1096.00	9248.00	1096.00	9306.00
1096.00	9372.00	1096.00	9430.00	1096.00	9492.00	1097.00	9548.00	1096.00	9587.00
1095.00	9621.00	1095.00	9671.00	1094.00	9713.00	1093.00	9777.00	1091.00	9824.00
1091.00	9864.00	1091.00	9920.00	1089.00	9954.00	1089.00	10000.00	1088.00	10057.00
1089.00	10111.00	1089.00	10183.00	1089.00	10258.00	1089.00	10308.00	1091.00	10363.00
1092.00	10430.00	1093.00	10491.00	1094.00	10545.00	1094.00	10622.00	1094.00	10693.00
1094.00	10770.00	1094.00	10844.00	1094.00	10915.00	1094.00	10979.00	1094.00	11042.00
1096.00	11102.00	1096.00	11150.00	1097.00	11207.00	1097.00	11272.00	1097.00	11348.00
1098.00	11423.00	1098.00	11500.00	1098.00	11579.00	1099.00	11662.00	1099.00	11737.00
1099.00	11811.00	1099.00	11875.00	1099.00	11949.00	1099.00	12023.00	1099.00	12111.00
1099.00	12190.00	1101.00	12260.00	1100.00	12329.00	1101.00	12401.00	1101.00	12465.00
1103.00	12520.00	1103.00	12552.00	1103.00	12625.00	1103.00	12729.00	1103.00	12843.00

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CROSS SECTION     14.88
STREAM  AGUA FRIA RIVER
DISCHARGE=   102500.


PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV******    -9996.    -9992.    -9988.    -9984.    -9980.    -9976.    -9972.    -9968.    -9964.    -9960.


    STA-FEET

8560 XSEC POINT-X      EL,ST-   1105.00   8665.00
 28650. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1117.00   8707.00
8560 XSEC POINT-X      EL,ST-   1132.00   8752.00
 48750. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1131.00   8812.00
8560 XSEC POINT-X      EL,ST-   1130.00   8870.00
 68850. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1131.00   8901.00
8560 XSEC POINT-X      EL,ST-   1131.00   8928.00
8560 XSEC POINT-X      EL,ST-   1127.00   8959.00
 98950. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1118.00   9006.00
8560 XSEC POINT-X      EL,ST-   1098.00   9056.00
119050. .         .         .         .         .         .         .         .         .         .         BANKX
8560 XSEC POINT-X      EL,ST-   1098.00   9103.00
8560 XSEC POINT-X      EL,ST-   1097.00   9159.00
139150. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1097.00   9209.00
8560 XSEC POINT-X      EL,ST-   1098.00   9260.00
159250. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1099.00   9302.00
8560 XSEC POINT-X      EL,ST-   1098.00   9353.00
179350. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1097.00   9402.00
8560 XSEC POINT-X      EL,ST-   1095.00   9456.00
199450. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1094.00   9510.00
8560 XSEC POINT-X      EL,ST-   1093.00   9565.00
219550. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1092.00   9622.00
8560 XSEC POINT-X      EL,ST-   1091.00   9656.00
8560 XSEC POINT-X      EL,ST-   1095.00   9677.00
249650. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1095.00   9728.00
8560 XSEC POINT-X      EL,ST-   1095.00   9783.00
269750. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1097.00   9823.00
8560 XSEC POINT-X      EL,ST-   1092.00   9875.00
289850. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1092.00   9905.00
8560 XSEC POINT-X      EL,ST-   1091.00   9942.00
8560 XSEC POINT-X      EL,ST-   1089.00  10000.00
319950. .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1089.00  10031.00
8560 XSEC POINT-X      EL,ST-   1090.00  10051.00
8560 XSEC POINT-X      EL,ST-   1091.00  10092.00
34***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1091.00  10131.00
8560 XSEC POINT-X      EL,ST-   1091.00  10177.00
7******
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36***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1092.00  10218.00
8560 XSEC POINT-X     EL,ST-   1090.00  10255.00
8560 XSEC POINT-X     EL,ST-   1090.00  10300.00
39***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1089.00  10331.00
8560 XSEC POINT-X     EL,ST-   1094.00  10346.00
8560 XSEC POINT-X     EL,ST-   1097.00  10362.00
42***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  10419.00
8560 XSEC POINT-X     EL,ST-   1098.00  10475.00
44***** .         .         .         .         .         .         .         .         .         .         BANKX
8560 XSEC POINT-X     EL,ST-   1097.00  10556.00
45***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1096.00  10641.00
46***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1096.00  10723.00
8560 XSEC POINT-X     EL,ST-   1097.00  10785.00
48***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  10857.00
49***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  10930.00
8560 XSEC POINT-X     EL,ST-   1097.00  10998.00
51***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11071.00
52***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11140.00
53***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11201.00
8560 XSEC POINT-X     EL,ST-   1097.00  11268.00
55***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11323.00
8560 XSEC POINT-X     EL,ST-   1097.00  11386.00
57***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11424.00
8560 XSEC POINT-X     EL,ST-   1094.00  11441.00
8560 XSEC POINT-X     EL,ST-   1094.00  11495.00
60***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1094.00  11539.00
8560 XSEC POINT-X     EL,ST-   1094.00  11565.00
8560 XSEC POINT-X     EL,ST-   1097.00  11581.00
63***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11611.00
8560 XSEC POINT-X     EL,ST-   1096.00  11662.00
65***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11715.00
8560 XSEC POINT-X     EL,ST-   1097.00  11780.00
67***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11849.00
68***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  11931.00
69***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  12017.00
70***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1097.00  12101.00
8560 XSEC POINT-X     EL,ST-   1097.00  12181.00
72***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1098.00  12252.00
73***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1099.00  12334.00
74***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1099.00  12422.00
75***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1099.00  12512.00
76***** .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X     EL,ST-   1100.00  12623.00
77*****                                                                                                      X
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```
77      .         .         .         .         .         .         .         .         .         .         .         X
8560 XSEC POINT-X      EL,ST-   1101.00  12720.00
78***** .         .         .         .         .         .         .         .         .         .         .         X
79***** .         .         .         .         .         .         .         .         .         .         .         X
80***** .         .         .         .         .         .         .         .         .         .         .         X
81***** .         .         .         .         .         .         .         .         .         .         .         X
83***** .         .         .         .         .         .         .         .         .         .         .         X
85***** .         .         .         .         .         .         .         .         .         .         .         X
86***** .         .         .         .         .         .         .         .         .         .         .         X

NRD=       0 ELLC=  9999999.00 ELTRD=  9999999.00
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EL(I),STA(I)

1105.00	8665.00	1117.00	8707.00	1132.00	8752.00	1131.00	8812.00	1130.00	8870.00
1131.00	8901.00	1131.00	8928.00	1127.00	8959.00	1118.00	9006.00	1098.00	9056.00
1098.00	9103.00	1097.00	9159.00	1097.00	9209.00	1098.00	9260.00	1099.00	9302.00
1098.00	9353.00	1097.00	9402.00	1095.00	9456.00	1094.00	9510.00	1093.00	9565.00
1092.00	9622.00	1091.00	9656.00	1095.00	9677.00	1095.00	9728.00	1095.00	9783.00
1097.00	9823.00	1092.00	9875.00	1092.00	9905.00	1091.00	9942.00	1089.00	10000.00
1089.00	10031.00	1090.00	10051.00	1091.00	10092.00	1091.00	10131.00	1091.00	10177.00
1092.00	10218.00	1090.00	10255.00	1090.00	10300.00	1089.00	10331.00	1094.00	10346.00
1097.00	10362.00	1097.00	10419.00	1098.00	10475.00	1097.00	10556.00	1096.00	10641.00
1096.00	10723.00	1097.00	10785.00	1097.00	10857.00	1097.00	10930.00	1097.00	10998.00
1097.00	11071.00	1097.00	11140.00	1097.00	11201.00	1097.00	11268.00	1097.00	11323.00
1097.00	11386.00	1097.00	11424.00	1094.00	11441.00	1094.00	11495.00	1094.00	11539.00
1094.00	11565.00	1097.00	11581.00	1097.00	11611.00	1096.00	11662.00	1097.00	11715.00
1097.00	11780.00	1097.00	11849.00	1097.00	11931.00	1097.00	12017.00	1097.00	12101.00
1097.00	12181.00	1098.00	12252.00	1099.00	12334.00	1099.00	12422.00	1099.00	12512.00
1100.00	12623.00	1101.00	12720.00	100000.00	12816.00	100000.00	12911.00	100000.00	13011.00
100000.00	13106.00	100000.00	13195.00	100000.00	13259.00	100000.00	13295.00	100000.00	13348.00

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CROSS SECTION     15.07
STREAM  AGUA FRIA RIVER
DISCHARGE=   104000.


PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV 1085.     1089.     1093.     1097.     1101.     1105.     1109.     1113.     1117.     1121.     1125.


    STA-FEET

 28900. .         .         .         .         .         .         .         .         .         .         .       X .
8560 XSEC POINT-X      EL,ST-   1130.00   8951.00
 59000. .         .         .         .         .         .         .         .         .         .         .  XXXXXX
 89100. .         .         .         .  XXXXXXXXXXXXXXXXX         .         .         .         .         .         .
129200. .         .      XXXXXXXXXXXXXXXXX  X .    WE  .         .         .         .         .         .         .
149300. .         .   XXXX .         .    C  .    WE  .         .         .         .         .         .         .
169400. .         .        XXXXXXXXX .    C  .    WE  .         .         .         .         .         .         .
179500. .         .         .      X .    C  .    WE  .         .         .         .         .         .         .
199600. .         .         . XXX    .    C  .    WE  .         .         .         .         .         .         .
219700. .         .         . X      .    C  .    WE  .         .         .         .         .         .         .
249800. .        XXXXXXXXXXX         .    C  .    WE  .         .         .         .         .         .         .
279900. .      XXXXXXXXXXXXXXXXXXXX .    C  .    WE  .         .         .         .         .         .         .
28***** .         .         .      X .    C  .    WE  .         .         .         .         .         .         .
30***** .         .         .      X .    C  .    WE  .         .         .         .         .         .         .
32***** .         .         .   X    .    C  .    WE  .         .         .         .         .         .         .
33***** .         .         .      X .    C  .    WE  .         .         .         .         .         .         .
36***** .         .         . XXX    .    C  .    WE  .         .         .         .         .         .         .
38***** .         .         .   X    .    C  .    WE  .         .         .         .         .         .         .
40***** .         .         .      XXX    C  .    WE  .         .         .         .         .         .         .
44***** .         .      X . XXX    . X  C  .    WE  .         .         .         .         .         .         .
46***** .         .         .   XXXXXXXXXXC  .    WE  .         .         .         .         .         .      BANK.
48***** .         .         .         .   XC  .    WE  .         .         .         .         .         .         .
50***** .         .         .         . XXXXXX .    WE  .         .         .         .         .         .         .
52***** .         .         .         .   XC  .    WE  .         .         .         .         .         .         .
54***** .         .         .        XXXX  C  .    WE  .         .         .         .         .         .         .
56***** .         .         .      XXX    C  .    WE  .         .         .         .         .         .         .
58***** .         .         .   XXXX .    C  .    WE  .         .         .         .         .         .         .
60***** .         .         .        X    C  .    WE  .         .         .         .         .         .         .
62***** .         .         .         . X  C  .    WE  .         .         .         .         .         .         .
64***** .         .         .         .   XXXX .    WE  .         .         .         .         .         .         .
65***** .         .         .         .      X .    WE  .         .         .         .         .         .         .
67***** .         .         .         .      X .    WE  .         .         .         .         .         .         .
69***** .         .         .         .        X    WE  .         .         .         .         .         .         .
71***** .         .         .         .        X    WE  .         .         .         .         .         .         .
72***** .         .         .         .      X .    WE  .         .         .         .         .         .         .
74***** .         .         .         .      X .    WE  .         .         .         .         .         .         .
75***** .         .         .         .      X .    WE  .         .         .         .         .         .         .
76***** .         .         .         .      X .    WE  .         .         .         .         .         .         .
77***** .         .         .         .      X .    WE  .         .         .         .         .         .         .
79***** .         .         .         .      XXX    WE  .         .         .         .         .         .         .
80***** .         .         .         .        X    WE  .         .         .         .         .         .         .
81***** .         .         .         .        X    WE  .         .         .         .         .         .         .
82***** .         .         .         .         . X WE  .         .         .         .         .         .         .
84***** .         .         .         .         . XXXE  .         .         .         .         .         .         .
85***** .         .         .         .         .   XE  .         .         .         .         .         .         .
87***** .         .         .         .         .      X .         .         .         .         .         .         .
88***** .         .         .         .         .        X         .         .         .         .         .         .
89***** .         .         .         .         .         . X      .         .         .         .         .         .
90***** .         .         .         .         .         . X      .         .         .         .         .         .
92***** .         .         .         .         .         . X      .         .         .         .         .         .
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93      .         .         .         .         .         .  X      .         .         .         .         .         .
94***** .         .         .         .         .         .  X      .         .         .         .         .         .
96***** .         .         .         .         .         .  X      .         .         .         .         .         .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1128.00	8922.00	1130.00	8951.00	1129.00	9002.00	1127.00	9026.00	1105.00	9065.00
1101.00	9091.00	1098.00	9131.00	1099.00	9159.00	1100.00	9202.00	1096.00	9234.00
1092.00	9248.00	1091.00	9294.00	1092.00	9344.00	1093.00	9404.00	1096.00	9438.00
1096.00	9500.00	1095.00	9552.00	1094.00	9610.00	1094.00	9664.00	1094.00	9719.00
1093.00	9785.00	1090.00	9799.00	1089.00	9838.00	1088.00	9886.00	1089.00	9923.00
1096.00	9950.00	1096.00	10000.00	1096.00	10059.00	1096.00	10111.00	1095.00	10173.00
1095.00	10235.00	1096.00	10295.00	1094.00	10357.00	1094.00	10403.00	1095.00	10433.00
1095.00	10499.00	1095.00	10548.00	1097.00	10579.00	1096.00	10636.00	1094.00	10653.00
1092.00	10688.00	1098.00	10701.00	1095.00	10743.00	1095.00	10786.00	1099.00	10802.00
1099.00	10858.00	1099.00	10915.00	1100.00	10965.00	1098.00	11014.00	1099.00	11073.00
1099.00	11119.00	1098.00	11152.00	1097.00	11204.00	1097.00	11261.00	1096.00	11318.00
1095.00	11372.00	1096.00	11410.00	1097.00	11451.00	1097.00	11505.00	1098.00	11572.00
1098.00	11633.00	1099.00	11687.00	1100.00	11743.00	1100.00	11810.00	1100.00	11866.00
1100.00	11910.00	1101.00	11958.00	1101.00	12008.00	1101.00	12064.00	1101.00	12124.00
1100.00	12208.00	1100.00	12271.00	1100.00	12328.00	1100.00	12400.00	1100.00	12467.00
1100.00	12574.00	1100.00	12652.00	1101.00	12732.00	1101.00	12822.00	1101.00	12904.00
1102.00	12986.00	1102.00	13060.00	1103.00	13137.00	1103.00	13210.00	1104.00	13269.00
1104.00	13350.00	1105.00	13424.00	1106.00	13507.00	1106.00	13593.00	1106.00	13666.00
1106.00	13739.00	1106.00	13809.00	1107.00	13882.00	1107.00	13966.00	1107.00	14047.00

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CROSS SECTION     15.26
STREAM  AGUA FRIA RIVER
DISCHARGE=   104000.


PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV 1090.    1094.     1098.     1102.     1106.     1110.     1114.     1118.     1122.     1126.     1130.


    STA-FEET

  29200. .         .         .         .                   .         .         .         .         .         .    X    .
  49300. .         .         .         .                   .         .         .         .         .         .    XXXX .
  79400. .         .      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX BANK.
  99500. .         XXXX      .         .  C  W   E         .         .         .         .         .         .         .
 119600. .         X         .         .  C  W   E         .         .         .         .         .         .         .
 139700. .         XXXXXXXXXXX         .  C  W   E         .         .         .         .         .         .         .
 159800. .         .         XXXX      .  C  W   E         .         .         .         .         .         .         .
 179900. .         .         XXXX      .  C  W   E         .         .         .         .         .         .         .
 19***** .         .         X         .  C  W   E         .         .         .         .         .         .         .
 21***** .         .         .  X      .  C  W   E         .         .         .         .         .         .         .
 24***** .         .       XXX         .  C  W   E         .         .         .         .         .         .         .
 26***** .         .         .    XXXX .  C  W   E         .         .         .         .         .         .         .
 28***** .         .         .       XXX  C  W   E         .         .         .         .         .         .         .
 30***** .         .         .         X  C  W   E         .         .         .         .         .         .         .
 32***** .         .         .       XXX  C  W   E         .         .         .         .         .         .         .
 34***** .         .         XXXX      .  C  W   E         .         .         .         .         .         .         .
 36***** .         .         XXXX      .  C  W   E         .         .         .         .         .         .         .
 40***** .         .         XXXX    X .  C  W   E         .         .         .         .         .         .         .
 43***** .         .    X  XXXXXX      .  C  W   E         .         .         .         .         .         .         .
 46***** .         .         XXXX      .  C  W   E         .         .         .         .         .         .         .
 49***** .         .         .         XXXX  W   E         .         .         .         .         .         .     BANK.
 51***** .         .         .         .  X  W   E         .         .         .         .         .         .         .
 52***** .         .         .         .  X  W   E         .         .         .         .         .         .         .
 54***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 55***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 57***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 58***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 60***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 61***** .         .         .         .    XW   E         .         .         .         .         .         .         .
  12100. .         .         .         .    XW   E         .         .         .         .         .         .         .
 63***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 64***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 66***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 67***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 68***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 69***** .         .         .         .    XW   E         .         .         .         .         .         .         .
 70***** .         .         .         .            X      .         .         .         .         .         .         .
 72***** .         .         .         .            X      .         .         .         .         .         .         .
 73***** .         .         .         .            X      .         .         .         .         .         .         .
 74***** .         .         .         .            X      .         .         .         .         .         .         .
 75***** .         .         .         .            X      .         .         .         .         .         .         .
 76***** .         .         .         .            X      .         .         .         .         .         .         .
 78***** .         .         .         .              X    .         .         .         .         .         .         .
 79***** .         .         .         .                   .    X    .         .         .         .         .         .
 81***** .         .         .         .                   .  XXX    .         .         .         .         .         .
 82***** .         .         .         .                   .  X      .         .         .         .         .         .
 83***** .         .         .         .                   .  X      .         .         .         .         .         .
 84***** .         .         .         .                   X         .         .         .         .         .         .
 85***** .         .         .         .                   X         .         .         .         .         .         .
 86***** .         .         .         .                   X         .         .         .         .         .         .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1132.00	9201.00	1133.00	9251.00	1132.00	9302.00	1131.00	9361.00	1112.00	9396.00
1097.00	9423.00	1095.00	9451.00	1094.00	9502.00	1094.00	9562.00	1094.00	9621.00
1094.00	9691.00	1098.00	9711.00	1098.00	9770.00	1099.00	9826.00	1099.00	9889.00
1098.00	9942.00	1098.00	9986.00	1098.00	10000.00	1099.00	10059.00	1099.00	10111.00
1098.00	10170.00	1098.00	10228.00	1097.00	10240.00	1100.00	10266.00	1101.00	10317.00
1101.00	10372.00	1102.00	10425.00	1102.00	10482.00	1102.00	10539.00	1102.00	10592.00
1101.00	10624.00	1098.00	10654.00	1099.00	10701.00	1098.00	10760.00	1099.00	10809.00
1099.00	10854.00	1101.00	10878.00	1098.00	10911.00	1098.00	10940.00	1097.00	10990.00
1096.00	11010.00	1099.00	11031.00	1099.00	11080.00	1098.00	11119.00	1098.00	11131.00
1102.00	11153.00	1103.00	11188.00	1103.00	11230.00	1103.00	11285.00	1103.00	11341.00
1103.00	11399.00	1104.00	11461.00	1104.00	11525.00	1104.00	11593.00	1104.00	11664.00
1104.00	11733.00	1104.00	11792.00	1104.00	11855.00	1104.00	11931.00	1104.00	11992.00
1104.00	12162.00	1104.00	12244.00	1104.00	12276.00	1104.00	12352.00	1104.00	12430.00
1104.00	12508.00	1104.00	12594.00	1104.00	12680.00	1107.00	12774.00	1107.00	12852.00
1107.00	12942.00	1107.00	13031.00	1107.00	13119.00	1107.00	13213.00	1107.00	13300.00
1108.00	13370.00	1108.00	13441.00	1112.00	13484.00	1112.00	13559.00	1111.00	13616.00
1111.00	13718.00	1111.00	13807.00	1110.00	13901.00	1110.00	13988.00	1110.00	14071.00

CROSS SECTION 15.45
STREAM AGUA FRIA RIVER
DISCHARGE= 105600.

PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

```
ELEV 1090.    1094.    1098.    1102.    1106.    1110.    1114.    1118.    1122.    1126.    1130.


   STA-FEET

 29200. .        .        .        .                 .        .        .        .        . X      .        .
 69300. .        .        .        .                 .        .        .        .     XXXX    X .     BANK.
 89400. .        .      XXX        .        C      W E.      .        .        .        .        .        .
 99500. .        .        X        .        C      W E.      .        .        .        .        .        .
129600. .        . X XXXXXX        .        C      W E.      .        .        .        .        .        .
159700. .      XXXXXX     .        .        C      W E.      .        .        .        .        .        .
179800. .        .        . XXXXXXXX        C      W E.      .        .        .        .        .        .
199900. .        .        .        . X      C      W E.      .        .        .        .        .        .
21***** .        .        .        X        C      W E.      .        .        .        .        .        .
23***** .        .        .      XXX        C      W E.      .        .        .        .        .        .
25***** .        .        .     XXXX .      C      W E.      .        .        .        .        .        .
27***** .        .        .        X        C      W E.      .        .        .        .        .        .
29***** .        .        .        .    X   C      W E.      .        .        .        .        .        .
31***** .        .        .        .   XXXXXX      W E.      .        .        .        .        .        .
32***** .        .        .        .        X      W E.      .        .        .        .        .        .
34***** .        .        .        .        X      W E.      .        .        .        .        .        .
35***** .        .        .        .      X C      W E.      .        .        .        .        .        .
37***** .        .        .        .      X C      W E.      .        .        .        .        .        .
39***** .        .        .      X .        C      W E.      .        .        .        .        .        .
42***** .        .        .      XXXXXX     C      W E.      .        .        .        .        .        .
45***** .        .        .        XXXX     C      W E.      .        .        .        .        .        .
47***** .        .        .      X .        C      W E.      .        .        .        .        .        .
49***** .        .        .        XXXXXXXXX C      W E.      .        .        .        .        .        .
51***** .        .        .        .        X      W E.      .        .        .        .        .     BANK.
52***** .        .        .        .        X      W E.      .        .        .        .        .        .
54***** .        .        .        .        X      W E.      .        .        .        .        .        .
56***** .        .        .        .        X      W E.      .        .        .        .        .        .
57***** .        .        .        .        X      W E.      .        .        .        .        .        .
59***** .        .        .        .           XXX W E.      .        .        .        .        .        .
61***** .        .        .        .           X   W E.      .        .        .        .        .        .
63***** .        .        .        .           XXX W E.      .        .        .        .        .        .
64***** .        .        .        .             X W E.      .        .        .        .        .        .
65***** .        .        .        .             X W E.      .        .        .        .        .        .
67***** .        .        .        .             X W E.      .        .        .        .        .        .
68***** .        .        .        .             X W E.      .        .        .        .        .        .
70***** .        .        .        .                XE.      .        .        .        .        .        .
71***** .        .        .        .                XE.      .        .        .        .        .        .
72***** .        .        .        .                  X      .        .        .        .        .        .
73***** .        .        .        .                  X      .        .        .        .        .        .
75***** .        .        .        .                  X      .        .        .        .        .        .
76***** .        .        .        .                  X      .        .        .        .        .        .
77***** .        .        .        .                  .  X   .        .        .        .        .        .
78***** .        .        .        .                  .  X   .        .        .        .        .        .
80***** .        .        .        .                 XXXX    .        .        .        .        .        .
81***** .        .        .        .                  .      X .      .        .        .        .        .
82***** .        .        .        .                  .      X .      .        .        .        .        .
83***** .        .        .        .                  .  X   .        .        .        .        .        .
85***** .        .        .        .                 XXXX    .        .        .        .        .        .
86***** .        .        .        .                  X      .        .        .        .        .        .
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NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1127.00	9230.00	1126.00	9276.00	1129.00	9293.00	1129.00	9325.00	1127.00	9350.00
1097.00	9392.00	1098.00	9440.00	1098.00	9492.00	1098.00	9552.00	1095.00	9598.00
1096.00	9642.00	1093.00	9681.00	1094.00	9705.00	1095.00	9733.00	1099.00	9771.00
1102.00	9812.00	1103.00	9861.00	1103.00	9909.00	1102.00	9956.00	1102.00	10000.00
1102.00	10066.00	1101.00	10116.00	1100.00	10167.00	1101.00	10219.00	1102.00	10280.00
1102.00	10324.00	1104.00	10361.00	1104.00	10418.00	1104.00	10483.00	1106.00	10544.00
1106.00	10607.00	1106.00	10673.00	1106.00	10740.00	1105.00	10817.00	1105.00	10885.00
1105.00	10950.00	1101.00	10968.00	1101.00	11023.00	1101.00	11073.00	1103.00	11099.00
1103.00	11132.00	1103.00	11159.00	1103.00	11191.00	1102.00	11221.00	1101.00	11282.00
1101.00	11348.00	1102.00	11390.00	1105.00	11441.00	1106.00	11491.00	1106.00	11541.00
1106.00	11601.00	1106.00	11665.00	1106.00	11724.00	1106.00	11790.00	1106.00	11844.00
1106.00	11906.00	1107.00	11954.00	1108.00	11998.00	1107.00	12058.00	1107.00	12104.00
1107.00	12173.00	1108.00	12243.00	1108.00	12323.00	1108.00	12401.00	1108.00	12470.00
1108.00	12532.00	1108.00	12571.00	1109.00	12671.00	1109.00	12747.00	1109.00	12829.00
1110.00	12912.00	1110.00	12978.00	1110.00	13052.00	1110.00	13143.00	1110.00	13225.00
1111.00	13313.00	1111.00	13383.00	1110.00	13451.00	1111.00	13528.00	1113.00	13611.00
1113.00	13701.00	1111.00	13784.00	1111.00	13861.00	1110.00	13942.00	1110.00	13983.00

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CROSS SECTION     15.65
STREAM  AGUA FRIA RIVER
DISCHARGE=   105600.


PLOTTED POINTS (BY PRIORITY)-B=BOTTOM BRIDGE,T=TOP BRIDGE,X=GROUND,W=WATER SUR,E=ENERGY GRADIENT,C=CRITICAL WSEL

ELEV 1095.      1099.     1103.     1107.     1111.     1115.     1119.     1123.     1127.     1131.     1135.


    STA-FEET

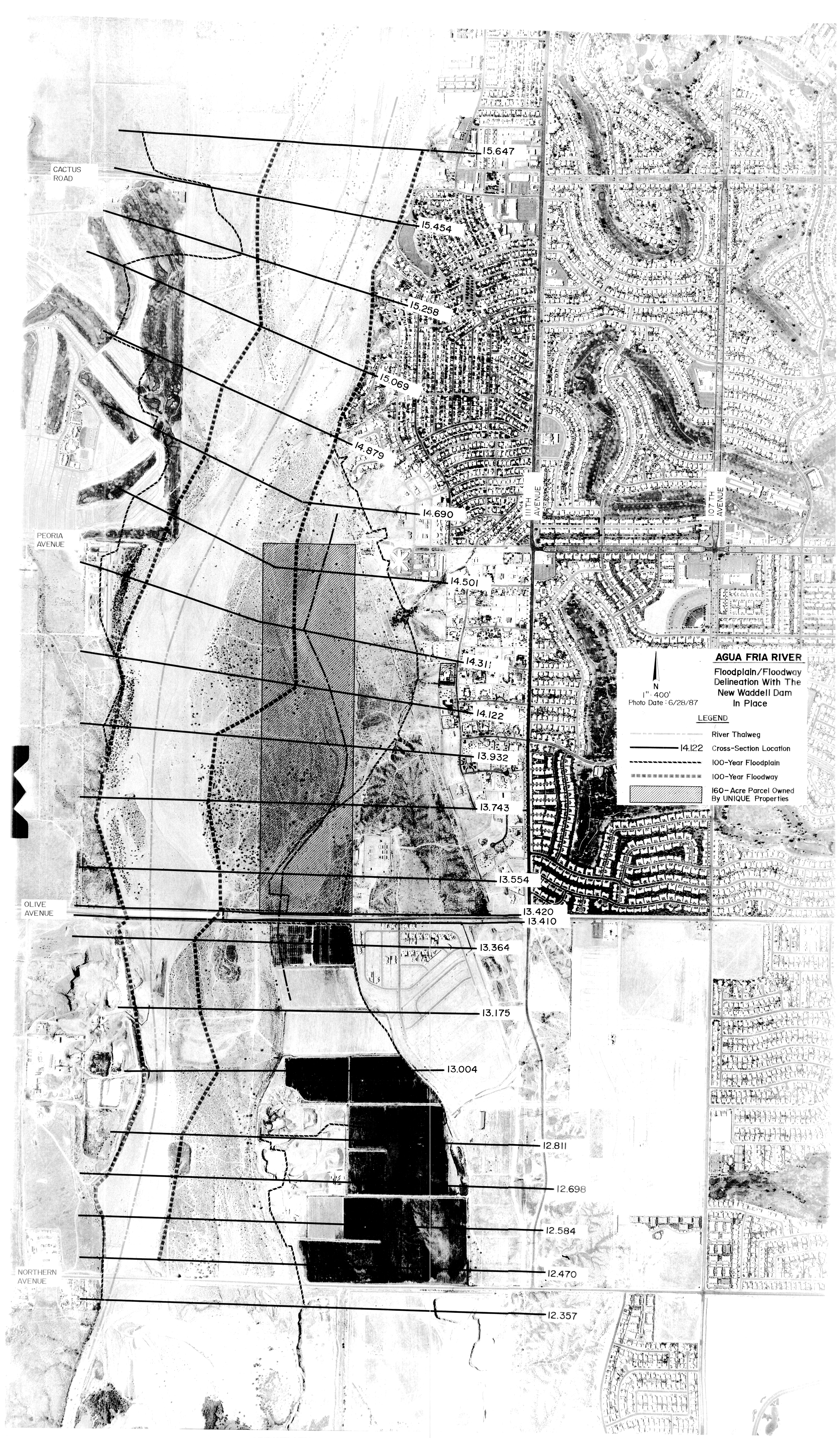
 28950.  .         .         .         .         .         .         .         .         .         .   X     .         .
 49050.  .         .         .         .         .         .         .         .         .   XXXXXXXXX       .         .
 79150.  .         .         .         .         XXXXXXXXXXXXXX      .         .         .         .         .         .
109250.  .         .         .         .         .         .   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       .         .
139350.  .    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      .     BANK.
149450.  .    X    .         .         .     C   .WE       .         .         .         .         .         .         .
179550.  .    XXXXXXXXX      .         .     C   .WE       .         .         .         .         .         .         .
209650.  .         .       XXXXXXXXXXX .     C   .WE       .         .         .         .         .         .         .
239750.  .         .         XXXXXXXXXXXXXX  C   .WE       .         .         .         .         .         .         .
259850.  .         .         .         .  X  C   .WE       .         .         .         .         .         .         .
279950.  .         .         .         XXXX  C   .WE       .         .         .         .         .         .         .
30*****  .         .         XXXXXXXXXXX     C   .WE       .         .         .         .         .         .         .
32*****  .         .         XXXXXX    .     C   .WE       .         .         .         .         .         .         .
35*****  .         .         XXXXXX    .     C   .WE       .         .         .         .         .         .         .
36*****  .         .         X         .     C   .WE       .         .         .         .         .         .         .
38*****  .         .         .       XXX     C   .WE       .         .         .         .         .         .         .
40*****  .         .         .         XXXXXXC   .WE       .         .         .         .         .         .         .
41*****  .         .         .         .    XC   .WE       .         .         .         .         .         .         .
43*****  .         .         .         .  XXXC   .WE       .         .         .         .         .         .         .
44*****  .         .         .         .  X  C   .WE       .         .         .         .         .         .         .
46*****  .         .         .         .  XXXXXX .WE       .         .         .         .         .         .         .
47*****  .         .         .         .  X  C   .WE       .         .         .         .         .         .         .
50*****  .         .         .  XXXXXXXXXXX  C   .WE       .         .         .         .         .         .         .
52*****  .         .         .  X      .     C   .WE       .         .         .         .         .         .         .
53*****  .         .         X         .     C   .WE       .         .         .         .         .         .         .
56*****  .         .       X XXXXXXXXX .     C   .WE       .         .         .         .         .         .         .
58*****  .         .         .         X     C   .WE       .         .         .         .         .         .     BANK.
59*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
61*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
62*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
63*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
65*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
66*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
67*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
69*****  .         .         .         X     C   .WE       .         .         .         .         .         .         .
70*****  .         .         .         .  X  C   .WE       .         .         .         .         .         .         .
71*****  .         .         .         .  X  C   .WE       .         .         .         .         .         .         .
72*****  .         .         .         .  X  C   .WE       .         .         .         .         .         .         .
74*****  .         .         .         .  X  C   .WE       .         .         .         .         .         .         .
75*****  .         .         .         .    XC   .WE       .         .         .         .         .         .         .
76*****  .         .         .         .    XC   .WE       .         .         .         .         .         .         .
77*****  .         .         .         .    XC   .WE       .         .         .         .         .         .         .
78*****  .         .         .         .    XC   .WE       .         .         .         .         .         .         .
79*****  .         .         .         .    XC   .WE       .         .         .         .         .         .         .
80*****  .         .         .         .    XC   .WE       .         .         .         .         .         .         .
81*****  .         .         .         .       X .WE       .         .         .         .         .         .         .
82*****  .         .         .         .       X .WE       .         .         .         .         .         .         .
83*****  .         .         .         .         XWE       .         .         .         .         .         .         .
84*****  .         .         .         .         XWE       .         .         .         .         .         .         .
85*****  .         .         .         .         XWE       .         .         .         .         .         .         .
86*****                                          XWE
```

```
86*****  .     .     .     .     XWE   .     .     .     .     .     .     .
87*****  .     .     .     .     XWE   .     .     .     .     .     .     .
88*****  .     .     .     .     .  X  .     .     .     .     .     .     .
90*****  .     .     .     .     .  X  .     .     .     .     .     .     .
91*****  .     .     .     .     .  X  .     .     .     .     .     .     .
92*****  .     .     .     .     .  X  .     .     .     .     .     .     .
93*****  .     .     .     .     .  X  .     .     .     .     .     .     .
94*****  .     .     .     .     .  X  .     .     .     .     .     .     .
95*****  .     .     .     .     .     X  .  .     .     .     .     .     .
96*****  .     .     .     .     .        X .     .     .     .     .     .
```

NRD= 0 ELLC= 9999999.00 ELTRD= 9999999.00

EL(I),STA(I)

1133.00	8960.00	1132.00	9020.00	1129.00	9053.00	1116.00	9102.00	1112.00	9132.00
1111.00	9180.00	1117.00	9218.00	1121.00	9247.00	1132.00	9282.00	1132.00	9312.00
1105.00	9351.00	1097.00	9377.00	1097.00	9442.00	1097.00	9507.00	1097.00	9552.00
1100.00	9589.00	1102.00	9625.00	1106.00	9645.00	1106.00	9697.00	1103.00	9744.00
1104.00	9760.00	1108.00	9783.00	1108.00	9832.00	1108.00	9886.00	1108.00	9941.00
1107.00	10000.00	1107.00	10026.00	1103.00	10033.00	1103.00	10080.00	1103.00	10134.00
1105.00	10152.00	1105.00	10213.00	1104.00	10262.00	1103.00	10293.00	1103.00	10387.00
1106.00	10402.00	1107.00	10463.00	1107.00	10531.00	1109.00	10588.00	1109.00	10650.00
1109.00	10717.00	1108.00	10775.00	1108.00	10857.00	1110.00	10925.00	1108.00	10993.00
1108.00	11065.00	1108.00	11134.00	1108.00	11178.00	1104.00	11194.00	1104.00	11251.00
1104.00	11297.00	1103.00	11348.00	1103.00	11402.00	1102.00	11441.00	1106.00	11460.00
1107.00	11506.00	1107.00	11566.00	1107.00	11644.00	1107.00	11712.00	1107.00	11791.00
1107.00	11868.00	1107.00	11941.00	1107.00	12010.00	1107.00	12080.00	1107.00	12151.00
1107.00	12223.00	1107.00	12302.00	1107.00	12391.00	1108.00	12469.00	1108.00	12532.00
1108.00	12610.00	1108.00	12703.00	1108.00	12785.00	1109.00	12845.00	1109.00	12930.00
1109.00	13028.00	1109.00	13119.00	1109.00	13215.00	1109.00	13335.00	1110.00	13438.00
1110.00	13541.00	1111.00	13647.00	1111.00	13742.00	1111.00	13867.00	1111.00	13948.00
1111.00	14028.00	1112.00	14120.00	1112.00	14234.00	1112.00	14251.00	1112.00	14356.00
1112.00	14475.00	1112.00	14574.00	1112.00	14676.00	1113.00	14748.00	1114.00	14843.00


CACTUS ROAD
PEORIA AVENUE
OLIVE AVENUE
NORTHERN AVENUE
111 TH AVENUE
107 TH AVENUE
15.647
15.454
15.258
15.069
14.879
14.690
14.501
14.31
14.122
13.932
13.743
13.554
13.420
13.410
13.364
13.175
13.004
12.811
12.698
12.584
12.470
12.357
AGUA FRIA RIVER
Floodplain/Floodway Delineation With The New Waddell Dam In Place
N
1" = 400'
Photo Date : 6/28/87
LEGEND
River Thalweg
14.122 Cross-Section Location
100-Year Floodplain
100-Year Floodway
160-Acre Parcel Owned By UNIQUE Properties