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FLOOD INSURANCE STUDY FOR BUCHANAN WASH FROM SKUNK CREEK TO C.A.P. CANAL MARICOPA COUNTY, ARIZONA

CONTRACT FCD 86-26

Registered Professional Engineer (Civil)
CERTIFICATE NO.
10283
SAMUEL E.
KAO
Date Signed 11-30-87
ARIZONA, U.S.A.

NOVEMBER 1987

AGK ENGINEERS, INC.

2255 North 44th Street
Suite 220
Phoenix, Arizona 85008

AGK Project No. 310.40

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FLOOD INSURANCE STUDY FOR

BUCHANAN WASH

FROM SKUNK CREEK TO C.A.P. CANAL

MARICOPA COUNTY, ARIZONA

This is to certify that all work accomplished in the conduct of this study was done in accordance with the Statement of Work and General Provision of Contract FCD 86-26, and all amendments thereto, together with all such modifications, either written or oral, as the Project Officers and/or the Contracting Officer or their representatives have directed, as such modifications affect this contract, and that all such work has been accomplished in accordance with sound and accepted engineering practice within the contract provision for respective phases of the work.

Signed: _____

Samuel E. Kao, Ph.D., P.E.
Vice President
AGK ENGINEERS, INC.

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1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study investigates the existence and severity of flood hazards for Buchanan Wash from Skunk Creek to C.A.P. Canal, Maricopa County, Arizona, and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for the study area that will be used to establish actuarial flood insurance rates and assist the County Flood Control District and local officials in their efforts to promote sound floodplain management. Minimum flood management requirements for participation in the National Flood insurance Program are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

1.2 Authority and Acknowledgements

The sources of authority for this Flood Control Insurance Study are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The hydrologic and hydraulic analyses for this study were performed by AGK Engineers, Inc. for the Flood Control District of Maricopa County, under Contract FCD 86-26. This study was completed in November, 1987.

1.3 Coordination

Streams requiring detailed study were identified in Exhibit A of the study contract dated September 5, 1986 and amended on May 28, 1987.

The Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers (COE), the U.S. Geological Survey (USGS), the U.S. Soil Conservation Service (SCS), the U.S. Bureau of Reclamation, the Federal Bureau of Land Management, the U.S. Fish and Wild Life Service, the Arizona Game and Fish Department, and the City of Phoenix were contacted for information and comments.

Vertical control data used to establish the network of elevation reference marks were obtained from the U.S. Geological Survey and the U.S. National Geodetic Survey.

The results of the study were submitted to the Flood Control District of Maricopa County for review on October 30, 1987. The study was acceptable to the County.

2.0 AREA STUDIED

2.1 Scope of Study

This Flood Insurance Study covers the reach of Buchanan Wash from the confluence of Skunk Creek to the Central Arizona Project (C.A.P.) Canal.

The main channel of Buchanan Wash and an unnamed tributary from the ponding area west of Deem Hills and the C.A.P. Canal to Buchanan Wash were studied by detailed methods. The area studied was selected with priority given to all known flood hazard areas.

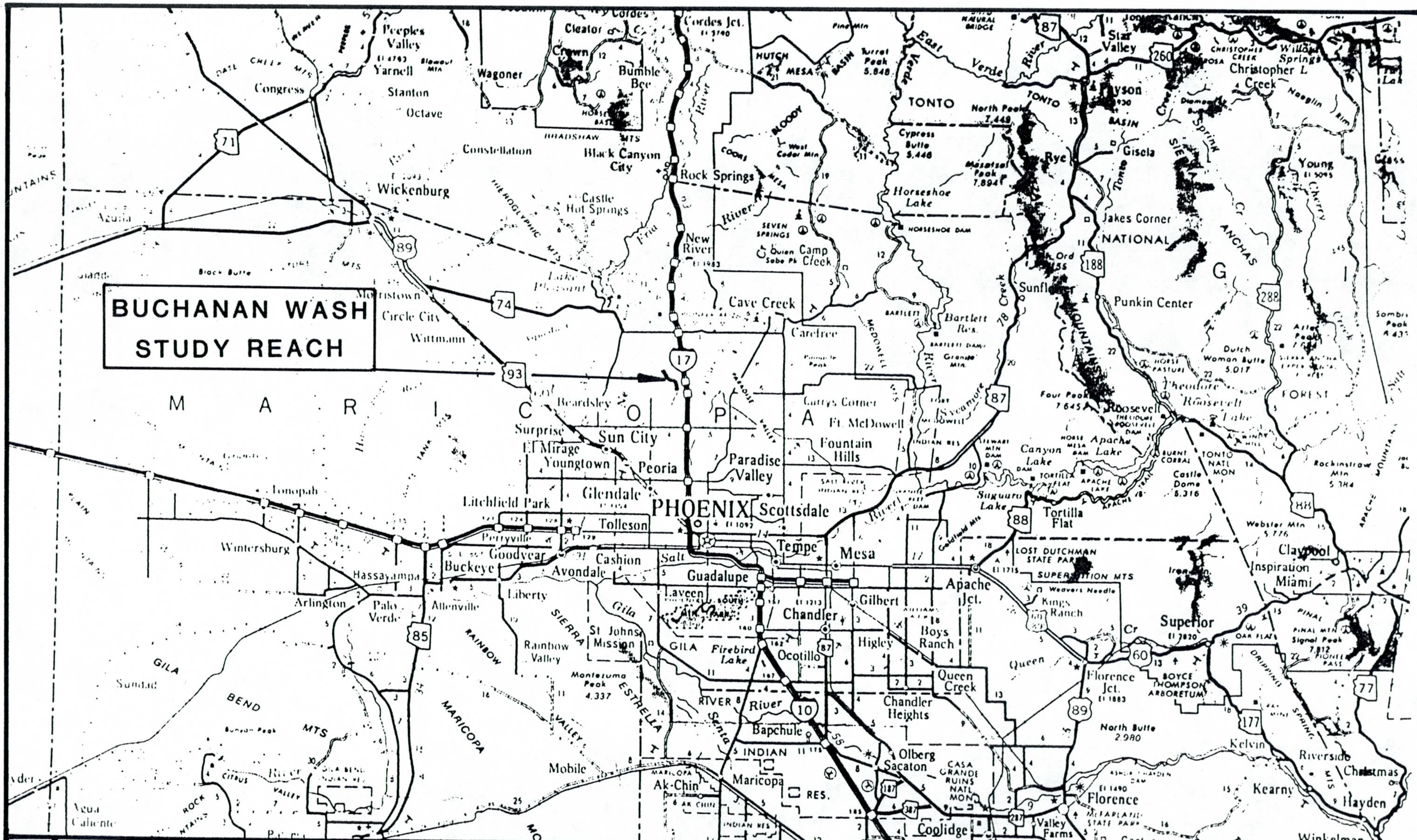


FIGURE 1

BUCHANAN WASH STUDY REACH

MARICOPA COUNTY, ARIZONA

APPROXIMATE SCALE

0 10 20 30 40

VICINITY MAP

The ponding area adjacent to the C.A.P. Canal, immediately west of Deem Hills, was studied by approximate methods. The scope and method of study were proposed to, and agreed upon by, the Flood Control District of Maricopa County.

2.2 Study Area Descripaion

Buchanan Wash, a tributary of Skunk Creek, is situated immediately west of Interstate 17 between Happy Valley Road and Carefree Highway. Stream reaches requiring detailed study under this contract are primarily located within Sections 34 and 35, Township 5 North, Range 2 East of the Gila and Salt River Base and Meridian.

The watershed of Buchanan Wash is approximately 11 square miles, which generally drains from north to south and joins Skunk Creek just north of Happy Valley Road. The natural drainage pattern of the watershed has been slightly altered since the C.A.P. Canal was constructed in the early 1980's. A portion of the runoff on the east side of the watershed is now intercepted by the canal and routed westerly along the canal to Buchanan Wash where the natural channel was replaced by a triple-barrel 66-inch diameter pipe culvert under the canal crossing.

General topography throughout the watershed is a combination of alluvial plain on the north and east as well as isolated steep bare rock hills on the south and west. The predominant hilly terrain is known as Deem Hills which forms the southwest boundary of the watershed.

Elevations of the alluvial plain range from 1720 feet in the north to 1430 feet at the confluence of Skunk Creek. The average gradient of Buchanan Wash within the detailed study area is approximately 0.6 percent or 32 feet per mile.

The climate of the study area is characterized by hot summer, mild winter and infrequent rainfall. The mean annual rainfall is about 7.1 inches, falling normally in two seasons. One season, primarily resulting from local convective storms, lasts from July to mid-September; the other season, mainly created by cyclonic (frontal) storms, extends from December through March. Of the two types of storms, the summer convective storm is considered to be the critical flood producing event in this area.

Average summer temperatures in the study area range from the high 70's degrees F in the early morning to the mid-100's degrees F in the afternoon, while average winter temperatures range from the high 30's to the mid-60's.

Soils in the study area are composed of three major groups: Rillito-Gunsight-Pinal association, Ebon-Pinamt-Tremant association, and Cherioni-Gachado-Rock Outcrop association (Reference 2).

Natural vegetation is sparse with plant species being typical to desert areas. Cacti, along with other desert shrubs grow throughout the watershed. Scattered trees such as palo verde and mesquite exist among the shrubs. The vegetation tends to be thicker along, and adjacent to, the stream courses. Perennial grasses grow after winter rains.

The majority of the land within the watershed is still in its natural state. The current development south of the canal, between Interstate 17 and Buchanan Wash, consists of light residential with some mobile homes. The same pattern of development is anticipated for the future.

2.3 Principal Flood Problems

During the summer months, convective storms are an important source of rainfall and runoff in Arizona. These storms are responsible for some of the most severe floods throughout the area.

Except the main channel of Buchanan Wash, the few existing channels in the watershed are generally small and poorly defined, and floodwater moves overland as sheet flow. During floods, brush and other vegetation growing in the water courses can impede flood flows, thus causing backwater and raising flood stages. Brush may be washed out and become an obstruction to restrict flood flows.

The C.A.P. Canal is the major man-made obstruction to the floodwater from the natural water courses. The triple-barrel pipe culvert under the canal will cause backwater and ponding effect to the area immediately north of the canal during the 100-year event.

Drainage from the area immediately west of Deem Hills is blocked by the C.A.P. Canal. Storm runoff generally accumulates at the depression without a proper outlet. When the depth of inundation at the depression exceeds the crest of the saddle, water breaks out and flows southeasterly as sheet flow toward Buchanan Wash.

Because the residential development in the watershed started just in recent years, information on flood severity or damage in the study area is not available at the present time.

2.4 Flood Protection Measures

There is no flood control structure within the study area. Currently, the study area is a part of the Phoenix, Arizona and Vicinity (including New River) Flood Control Project administered by the Flood Control District of Maricopa County.

3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the study area, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude which are expected to be equalled or exceeded once on the average during any 10-, 50-, 100- or 500-year period (recurrence interval) have been selected as having special significance for flood plain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100- and 500-year floods, have a 10, 2, 1, and 0.2 percent chance, respectively, of being equalled or exceeded during any one year. Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when

periods greater than one year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (1 percent chance of annual exceedence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the study area at the time of this study's completion. The analyses reported herein reflect current conditions in the watersheds of the flooding sources. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for Buchanan Wash and its tributaries. Since no gaging station is available in the watershed, there is no means to develop discharge-frequency relationships from historical flood records. As a result, the HEC-1 computer model as developed by the U. S. Army Corps of Engineers (Reference 8) was used for generating flood peaks at various concentration points in the watershed.

The watershed was subdivided into a number of subwatersheds to form an interconnected system of stream network components. The boundaries of the subwatersheds were determined based on the USGS quadrangle maps (Reference 5) and the 1 inch=1000 feet aerial photographs obtained from Cooper Aerial Survey Company (Reference 7). The drainage boundaries near the Carefree Highway interchange were determined with the aid of the as-built highway plans for Interstate 17, obtained from Arizona Department of Transportation (Reference 11). Field verification supplemented the mapping inadequacies in determination of drainage boundaries.

The precipitation frequencies for the study area were obtained from isopluvial charts as shown on NOAA Atlas 2, prepared by the U. S. Department of Commerce (Reference 4). The SCS Type II dimensionless distribution of cumulative rainfall table (revised in May 1982) was used for generating the rainfall hyetographs.

The SCS curve number was used for the determination of rainfall losses due to interception and infiltration. The curve numbers were estimated from the tables in the SCS National Engineering Handbook Section 4, Hydrology, 1972 (Reference 3), according to the soil information obtained

from the General Soil Map for Maricopa County, as prepared by SCS in 1973 (Reference 2).

The kinematic wave overland-flow option of the HEC-1 computer model was used in this study. The effective roughness parameters were based on the category of sparse vegetation, per Table 3.5 of the HEC-1 Users Manual.

The kinematic wave method was used for flood routing from upstream to downstream. The cross-sectional geometry was approximated by a trapezoidal shape. The level-pool reservoir routing was used for flows through culverts, such as at the C.A.P. Canal. The relationship between the volume of storage and the elevation was established based on the aerial photographs with 2-foot contour intervals.

Because the runoff peak may occur from storm ranging in duration from one hour to 24 hours, the peak rates were computed for storm durations of one-hour, two-hours, three-hours, six-hours, and 24-hours, and the greatest peak was selected as the input for hydraulic analyses. Peak discharge-drainage area relationships for Buchanan Wash and its tributary are shown in Table 1.

TABLE 1 SUMMARY OF DISCHARGES

Flood Source and Location	Drainage Area Sq. Miles	Peak Discharges (cfs) 10-Yr	50-Yr	100 Yr	500-Yr
Main Channel					
At 800 feet downstream of C.A.P. Canal	9.17	1065	1253	1308	1407
At 4300 feet downstream of C.A.P. Canal	9.99	1175	1467	1609	1958
At Confluence of Skunk Creek	11.29	1422	2005	2304	3067
Initial Water Surface Elevation		1456.50	1458.93	1460.42	1465.95
Tributary					
At Cross Section 2.045 of Main Channel	0.43	100	231	301	467
Initial Water Surface Elevation		1491.37	1491.72	1491.87	1492.24

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals.

Cross-section data for the backwater analyses were obtained from topographic maps, at a scale of 1 inch=200 feet and 2-foot contour intervals, prepared specifically for this project by Aerial Mapping Company, Inc., flown in September, 1986 (Reference 6). Locations of selected cross-sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). Buchanan Wash included a floodway analysis (Section 4.2), therefore selected cross section locations are also shown on the Flood Boundary and Floodway Maps (Exhibit 2).

Detailed methods were used to determine the water-surface elevations for the various frequency floods using the U. S. Army Corps of Engineers HEC-2 step backwater computer program (Reference 9).

Hydraulic roughness factors (Manning's "n") used in the hydraulic computations, were chosen by engineering judgment and based on field observations of the streams and

floodplain areas. Due to the cobble bottom and weedy banks, a roughness value of 0.055 was used for the channels. Furthermore, this roughness value of 0.055 was also used for the overbank area, as directed by FCDMC on March 17, 1987.

Starting water surface elevations for Buchanan Wash main channel were obtained from the U. S. Army Corps of Engineers' study results for Skunk Creek in 1981 (Reference 1).

All elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD). Elevation reference marks used in the study are shown on the maps, and are described in the attached Tables.

The effect on ponding from a 100-year storm to the area immediately west of Deem Hills was examined by approximate methods. The inundated area due to ponding was delineated on the basis of the HEC-1 computer modeling results. The crest elevation of the ponding subject to a 100-year storm was estimated to be 1509.24.

4.0 FLOOD PLAIN MANAGEMENT APPLICATIONS

The National Flood Insurance Program encourages State and local governments to adopt sound flood plain management programs. Therefore, each Flood Insurance Study produces maps designed to assist communities in developing flood plain management measures.

4.1 Flood Boundaries

To provide a national standard without regional discrimination, the 1 percent annual chance (100-year) flood has been adopted by FEMA as the base flood for flood plain management purposes. The 0.2 percent annual chance (500-year) flood is employed to indicate additional areas of flood risk in the community. For each stream studied in detail, the 100- and 500-year flood plain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps (Reference 6).

The 100- and 500-year flood plain boundaries are shown on the Flood Boundary and Floodway Map (Exhibit 2). In cases where the 100- and 500-year flood plain boundaries are close together, only the 100-year flood plain boundary has been shown. Small areas within the flood plain boundaries may lie above the flood elevations but cannot be shown due to

limitations of the map scale and/or lack of detailed topographic data.

For the area studied by approximate methods, only the 100-year flood boundaries are shown on the Flood Boundary and Floodway Map (Exhibit 2).

4.2 Floodways

Encroachment on flood plains, such as structures and fill, reduces flood-carrying capacity, increased flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of flood plain management involves balancing the economic gain from flood plain development against the resulting increase in flood hazard. For purposes of the National Flood Insurance Program, a floodway is used as a tool to assist local communities in this aspect of flood plain management. Under this concept, the area of the 100-year flood plain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent flood plain areas, that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as

minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this study were computed on the basis of equal conveyance reduction from each side of the flood plain. The results of these computations are tabulated at selected cross sections for each stream segment for which a floodway is computed (see attached Tables).

As shown on the Flood Boundary and Floodway Map (Exhibit 2), the floodway boundaries were computed at cross sections. Between cross sections, the boundaries were interpolated. In cases where the floodway and 100-year flood plain boundaries are either close together or collinear, only the floodway boundary has been shown.

The area between the floodway and 100-year flood plain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the flood plain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood by more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to flood plain development are shown in Figure 2.

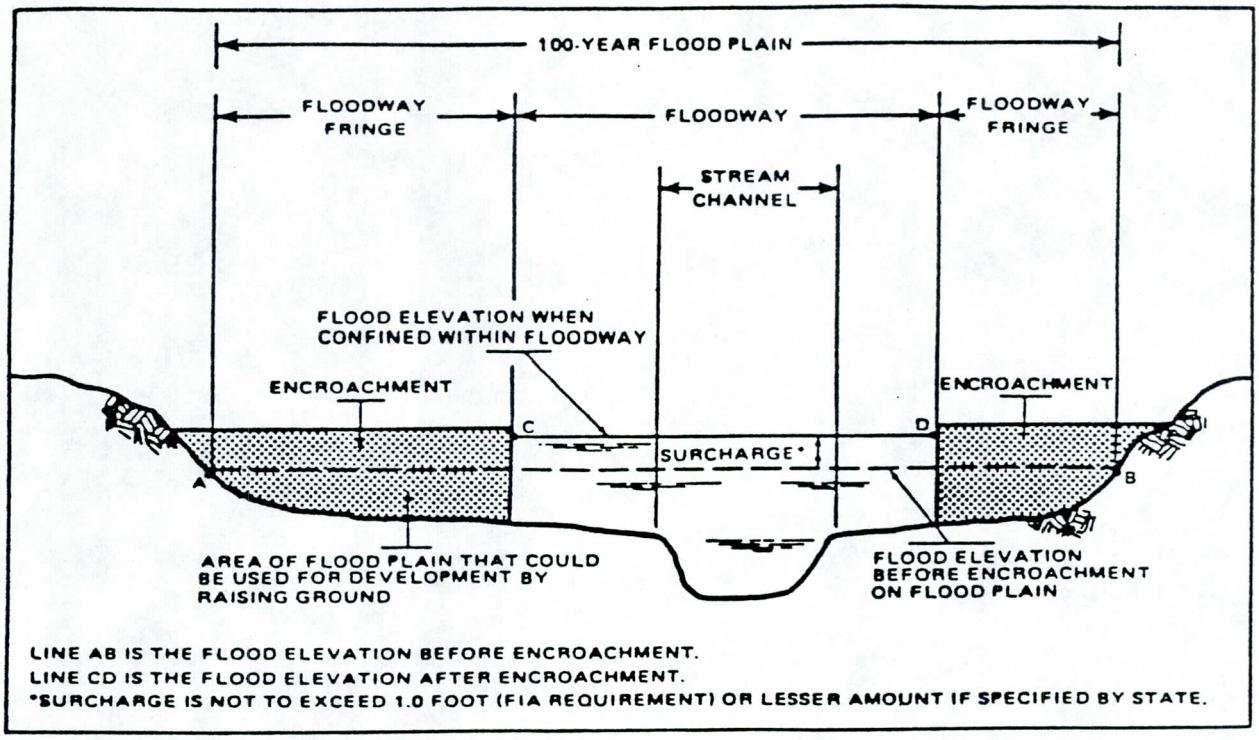


Figure 2. Floodway Schematic

5.0 INSURANCE APPLICATION

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 100-year flood plains that are determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no base flood elevations or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 100-year flood plains that are determined in the Flood Insurance Study by detailed methods. In most instances, whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					(FEET NGVD)			
A	0.710	658	4041	0.6	N/A	1461.4	1460.4	1.0
B	0.782	557	2637	0.9		1461.4	1460.4	1.0
C	0.890	178	518	4.4		1461.4	1460.5	0.9
D	0.985	124	507	4.5		1464.2	1463.2	1.0
E	1.120	93	438	5.3		1467.4	1466.6	0.8
F	1.207	96	401	5.7		1470.0	1469.0	1.0
G	1.288	103	469	4.9		1472.5	1471.6	0.9
H	1.383	69	351	6.6		1475.1	1474.3	0.8
I	1.483	69	358	4.5		1478.3	1477.3	1.0
J	1.572	113	430	3.7		1479.9	1479.0	0.9
K	1.638	62	244	6.6		1481.4	1480.6	0.8
L	1.695	122	418	3.8		1483.6	1482.6	1.0
M	1.761	61	239	6.7		1485.2	1484.5	0.7
N	1.856	50	298	5.4		1488.5	1487.5	1.0

*Miles above confluence with Skunk Creek

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

Flood Insurance Study
Buchanan Wash
Maricopa County, Arizona

FLOODWAY DATA

BUCHANAN WASH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
						(FEET NGVD)		
O	1.951	66	353	4.6	N/A	1490.5	1489.5	1.0
P	2.045	111	352	4.6		1492.8	1491.9	0.9
Q	2.121	43	205	6.4		1495.2	1494.4	0.8
R	2.200	187	587	2.2		1496.9	1496.0	0.9

*Miles above confluence with Skunk Creek

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

Flood Insurance Study
Buchanan Wash
Maricopa County, Arizona

FLOODWAY DATA

BUCHANAN WASH

Zone AH

Zone AH is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AO

Zone AO is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the detailed hydraulic analyses are shown within this zone.

Zone A99

Zone A99 is the flood insurance rate zone that corresponds to areas of the 100-year flood plain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or depths are shown within this zone.

Zone V

Zone V is the flood insurance rate zone that corresponds to the 100-year coastal flood plains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no base flood elevations are shown within this zone.

Zone VE

Zone VE is the flood insurance rate zone that corresponds to the 100-year coastal flood plains that have additional hazards associated with storm waves. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance rate zone that corresponds to areas outside the 500-year flood plain, areas within the 500-year flood plain, areas of 100-year flooding where average depths are less than 1 foot, areas of 100-year flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 100-year flood by levees. No base flood elevations or depths are shown within this zone.

Zone D

Zone D is the flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.

6.0 FLOOD INSURANCE RATE MAP

The Flood Insurance Rate Map is designed for flood insurance rate zones as described in Section 5.0 and, in the 100-year flood plains that were studied by detailed methods, shows selected whole-foot base flood elevations or average depths. Insurance agents use the zones and base flood elevations in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For flood plain management applications, the map shows by tints, screens, and symbols, the 100- and 500-year flood plains, the floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

7.0 OTHER STUDIES

The U. S. Army Corps of Engineers studied the 10-, 50-, 100-, and 500-year flood levels for Skunk Creek in 1981 (Reference 1). The

results of that study were used to determine the starting water surface elevations in this study.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting the Flood Control District of Maricopa County, 3335 West Durango Street, Phoenix, Arizona 85009.

9.0 BIBLIOGRAPHY AND REFERENCES

1. U. S. Department of the Army, Corps of Engineers, L.A. District Office, Flood Studies for Skunk Creek, Maricopa County, Arizona, 1981.

2. U. S. Department of Agriculture, Soil Conservation Service, General Soil Map of Maricopa County, Arizona, 1973.

3. U. S. Department of Agriculture, Soil Conservation Service, National Engineering Handbook, Section 4, Hydrology, 1972.

4. U. S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Precipitation-Frequency Atlas of the Western United States, Volume VIII-Arizona, 1973.

5. U. S. Department of the Interior, Geological Survey, 7.5 Minute Series Topographic Maps, Scale 1:24,000, Contour Intervals vary: Biscuit Flat, Hedgpeth Hills, New River SE, and Union Hills, Maricopa County, Arizona.

6. Aerial Mapping Company, Inc., Topographic Maps for Buchanan Wash, Scale 1"=200', Contour Interval = 2 feet, September 1986.

7. Cooper Aerial Survey Co, Aerial Photograph for Metropolitan Phoenix, T5N, R2E, Scale 1"=1000', April 1984.

8. U. S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center, Generalized Computer Program 723-X6-L2010, HEC-1 Flood Hydrograph Package, Davis, California, September 1981, Revised January 1985.

9. U. S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center, Generalized Computer Program 723-X6-L202A, Hec-2 Water Surface Profiles, Davis, California, November 1976.

10. Arizona Highway Department, Bridge Division, Hydraulic Design for Highway Drainage in Arizona, March 1969.

11. Arizona Department of Transportation, As-built Plan for Phoenix-Cordes Junction Highway from Happy Valley Road to Carefree Highway, September 1984.

12. Arizona Department of Transportation, Arizona Road Map, 1985.

13. Aldridge, B.N. & J.M. Garrett, Roughness Coefficients for Stream Channels in Arizona, USGS Open-File Report, Tucson, Arizona, February 1973.

14. Chow, Ven T., Open Channel Hydraulics, New York: McGraw-Hill Book Company, 1959.

15. U. S. Department of Commerce, Bureau of Public Roads, Hydraulic Charts for the Selection of Highway Culverts, September 1961.

16. Hill, R.H. and Seller, W.D., Arizona Climate 1931-1972, 1974.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM515	1482.464	Set 1/2" rebar with aluminum cap stamped 515. 1000'± South-Southwest point #714, 75'± South of a wash at the foot of a rocky hill. 0.10' above the surface.
RM516	1482.744	Set 1/2" rebar with aluminum cap stamped 516. 60'± South of fence corner 65'± East-Southeast of power pole #27500, 15'± East of Gravel Road. 0.21 above the surface.
RM517	1500.398	Found United States Department of the Interior brass cap along C.A.P. Canal stamped point #44, Station 373+41.83, 125' right.
RM518	1514.095	Found United States Department of the Interior brass cap along C.A.P. Canal stamped point #37, Station 373+41.83, 150' right.
RM519	1524.816	Set 1/2" rebar with aluminum cap stamped 519, 2000'± South of Canal 75'± West end of a Jeep trail in a draw North side of Deem Hills.
RM520	1523.022	Found United States Department of the Interior brass cap point of intersection 175' right back 150' ahead reset.
RM522	1503.882	Found A.D.O.T. benchmark stamped 517-3 in concrete cylinder 300'± North of Northeast corner of Section 33 T5N R2E.
RM525	1502.168	Found United States Department of the Interior brass cap along C.A.P. Canal. Point #43, Station 386+00, 125' right.
RM526	1499.817	Found United States Department of the Interior brass cap along C.A.P. Canal. Point #45, Station 402+67.37, 125' right.
RM704	1502.110	Found 1/2" iron pipe 0.25' above surface at the Northeast Corner of Section 33 T5N R2E.
RM712	1555.108	Found stone at the Southeast corner of Section 34 T5N R2E.
RM713	1457.813	Found 1/2" rebar 1' South of fence 10'± West of the toe of Skunk Creek Levee. 0.10' above the surface. Assumed to be North 1/4 corner of Section 2 T5N R2E.
RM714	1477.934	Found 3/4" iron pipe flush at the center East 1/16th Corner of Section 34 T5N R2E.
RM724	1472.023	Found 1" iron pipe 0.08' below the surface at the East 1/4 corner of Section 34 T5N R2E.

NOTE: Vertical elevations listed are based on the Sea Level Datum of 1929 as monumented by the United States National Geodetic Survey and the United States Geological Survey.

Map based on 1" = 200' topographic mapping prepared by Aerial Mapping Company from photographs taken in September 1986. (File No. 86119)

WORK MAP

100-Year Flood Plain Boundary	
500-Year Flood Plain Boundary	
Floodway Boundary	
Approximate (100-Year) Flood Plain Boundary	
Hydraulic Base Line	75 — 76
Cross Section	A — A
Elevation Reference Marks	RM7 X
River Mile	•M 15
Zone Gutters	
Base Flood Elevations	580
Base Flood Elevation/or Depth (Uniform)	(EL 15)/(DEPTH 2')
Zone designations	ZONE AE
Area between 100-year and 500-year flood plains	

2.200
- 0.710
1.490

AGK Job No. 310.40

AGK ENGINEERS, INC.
Telephone (602) 244-2566
2255 North 44th Street, Suite 220
Phoenix, Arizona 85008

	BY	DATE
DESIGN	C.O.H.	10-87
DESIGN CHK.	S.E.K.	11-87
PLANS	G.L.T.	10-87
PLANS CHK.	S.E.K.	11-87

SUBMITTED BY: Samuel E. Kay DATE 11/30/87

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

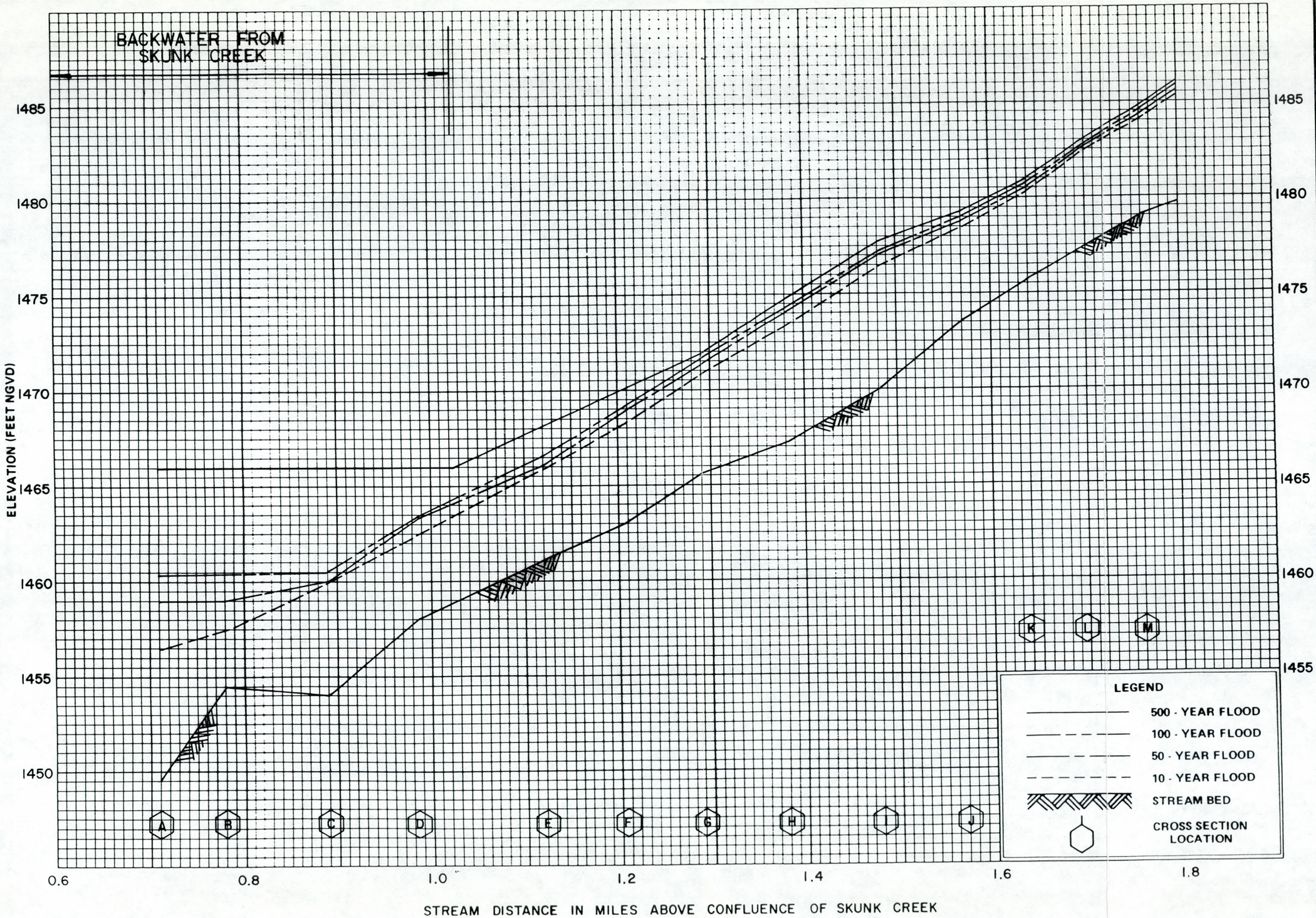
BUCHANAN WASH FLOODPLAIN DELINEATION

SKUNK CREEK TO C.A.P. CANAL

RECOMMENDED BY: DATE

APPROVED BY: DATE
CHIEF ENGINEER & GENERAL MANAGER

SHEET 1 OF 1



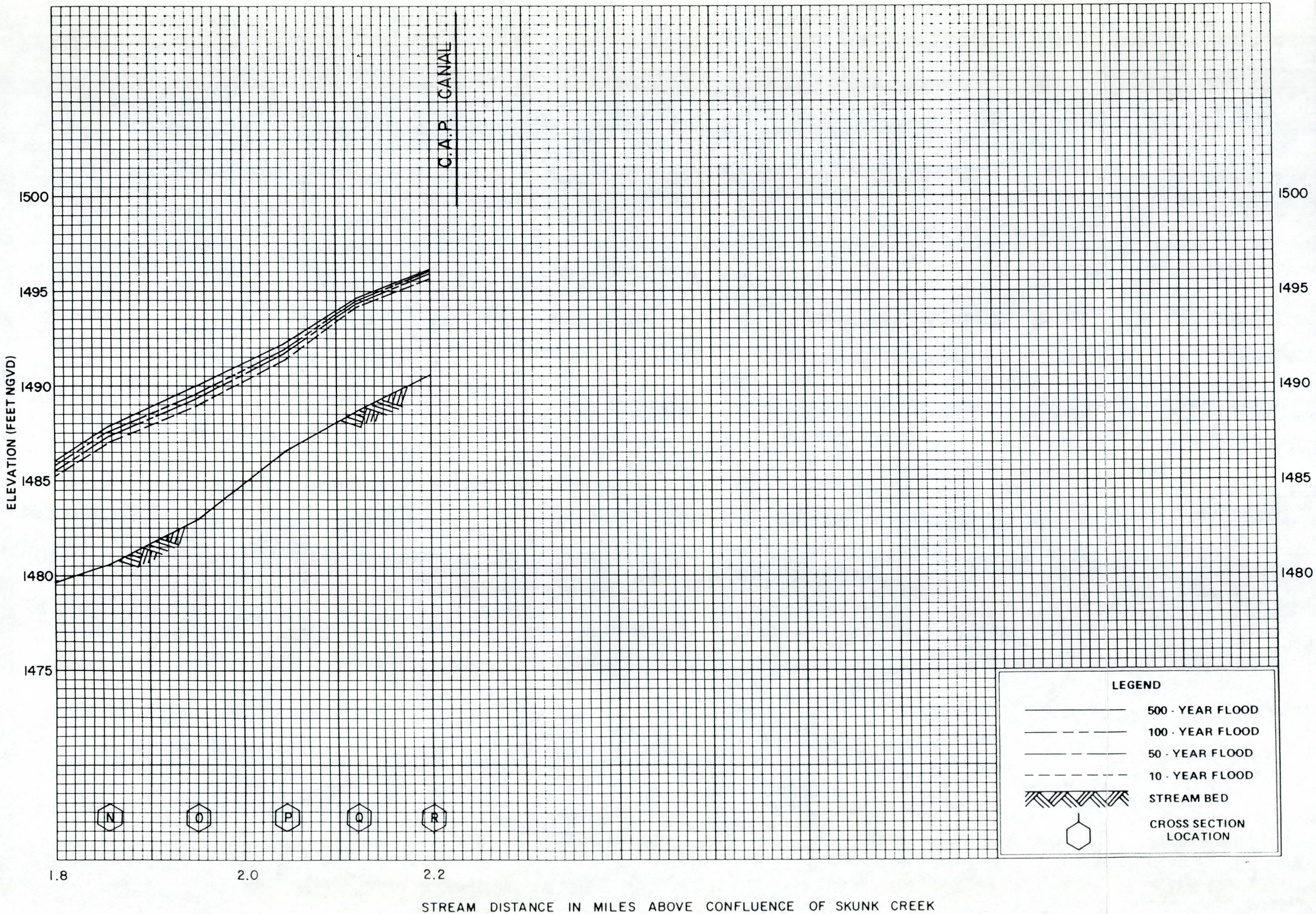
FLOOD PROFILES

BUCHANAN WASH

FEDERAL EMERGENCY MANAGEMENT AGENCY

BUCHANAN WASH
MARICOPA COUNTY, ARIZONA

OIP



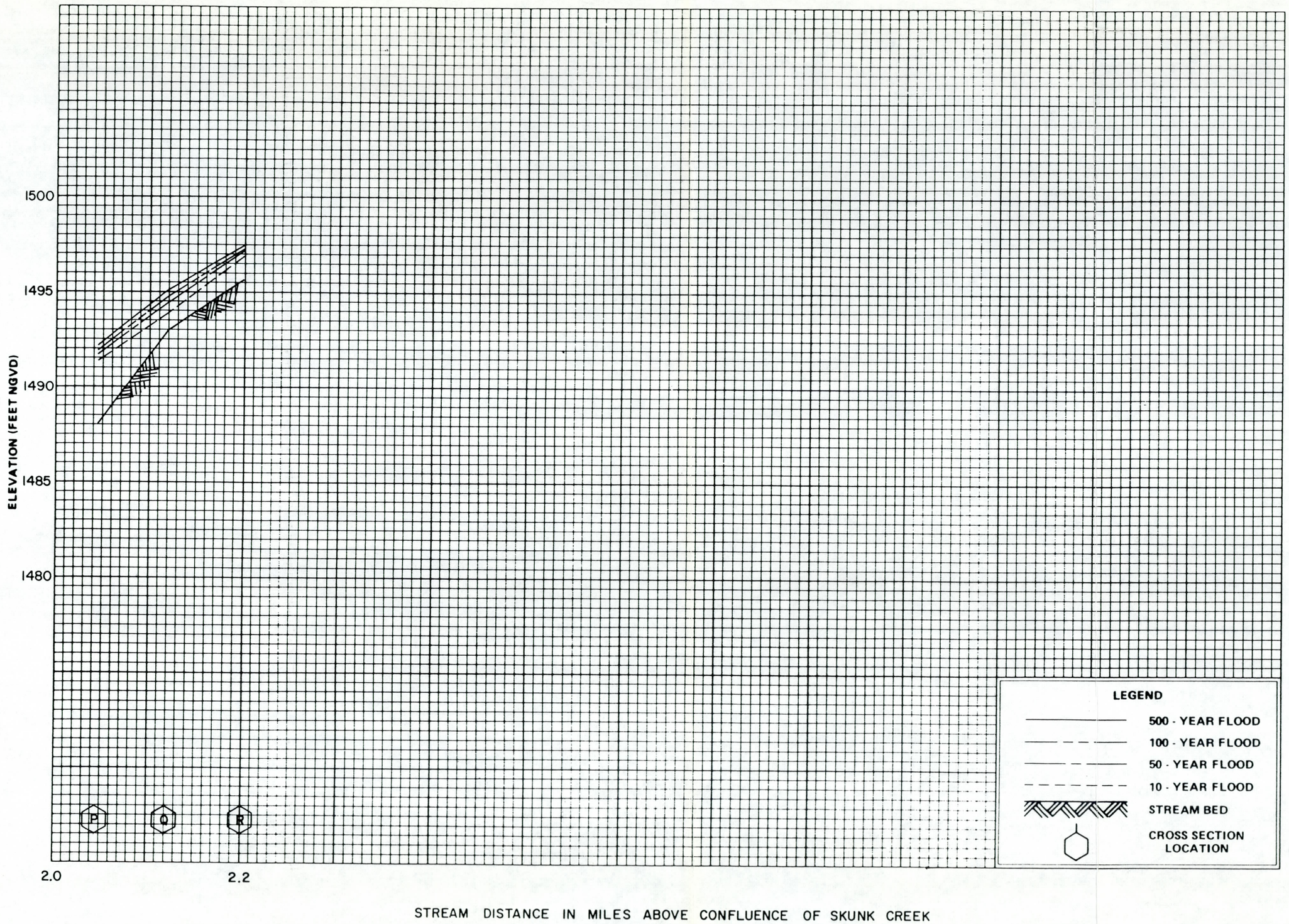
FLOOD PROFILES

BUCHANAN WASH

FEDERAL EMERGENCY MANAGEMENT AGENCY

BUCHANAN WASH
MARICOPA COUNTY, ARIZONA

02P



FLOOD PROFILES

TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

BUCHANAN WASH

MARICOPA COUNTY, ARIZONA

03P

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM515	1482.464	Set 1/2" rebar with aluminum cap stamped 515. 1000'± South-Southwest point #714, 75'± South of a wash at the foot of a rocky hill. 0.10' above the surface.
RM516	1482.744	Set 1/2" rebar with aluminum cap stamped 516. 60'± South of fence corner 65'± East-Southeast of power pole #27500, 15'± East of Gravel Road. 0.21 above the surface.
RM517	1500.398	Found United States Department of the Interior brass cap along C.A.P. Canal stamped point #44, Station 373+41.83, 125' right.
RM518	1514.095	Found United States Department of the Interior brass cap along C.A.P. Canal stamped point #37, Station 373+41.83, 150' right.
RM519	1524.816	Set 1/2" rebar with aluminum cap stamped 519, 2000'± South of Canal 75'± West end of a Jeep trail in a draw North side of Deem Hills.
RM520	1523.022	Found United States Department of the Interior brass cap point of intersection 175' right back 150' ahead reset.
RM522	1503.882	Found A.D.O.T. benchmark stamped 517-3 in concrete cylinder 300'± North of Northeast corner of Section 33 T5N R2E.
RM525	1502.168	Found United States Department of the Interior brass cap along C.A.P. Canal. Point #43, Station 386+00, 125' right.
RM526	1499.817	Found United States Department of the Interior brass cap along C.A.P. Canal. Point #45, Station 402+67.37, 125' right.
RM704	1502.110	Found 1/2" iron pipe 0.25' above surface at the Northeast Corner of Section 33 T5N R2E.

ELEVATION REFERENCE MARKS (continued)

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM712	1555.108	Found stone at the Southeast corner of Section 34 T5N R2E.
RM713	1457.813	Found 1/2" rebar 1' South of fence 10'± West of the toe of Skunk Creek Levee. 0.10' above the surface. Assumed to be North 1/4 corner of Section 2 T5N R2E.
RM714	1477.934	Found 3/4" iron pipe flush at the center East 1/16th Corner of Section 34 T5N R2E.
RM724	1472.023	Found 1" iron pipe 0.08' below the surface at the East 1/4 corner of Section 34 T5N R2E.

NOTE: Vertical elevations listed are based on the Sea Level Datum of 1929 as monumented by the United States National Geodetic Survey and the United States Geological Survey.

HEC-2 RESULTS

BUCHANAN WASH

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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 1.1
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T1 FLOODPLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DISTRICT
T2 10 YEAR FLOOD EVENT - BASED ON 6-HR RAINFALL
T3 BUCHANAN WASH - SKUNK CREEK TO C.A.P. CANAL SEPTEMBER, 1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	.000000	.00	.0	0.	1456.500	.000

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38.000	43.000	1.000	8.000	3.000	26.000	4.000	53.000	54.000	150.000

QT	4.000	1422.000	2005.000	2304.000	3067.000	.000	.000	.000	.000	.000
NC	.055	.055	.055	.100	.300	.000	.000	.000	.000	.000
X1	.710	57.000	9985.000	10025.000	.000	.000	.000	.000	.000	.000
GR	1464.300	8805.000	1465.200	8829.000	1465.900	8860.000	1465.600	8890.000	1465.500	8945.000
GR	1464.600	9006.000	1464.200	9072.000	1463.000	9130.000	1462.300	9188.000	1461.100	9257.000
GR	1461.000	9317.000	1461.300	9374.000	1460.800	9426.000	1459.100	9474.000	1457.400	9519.000
GR	1456.700	9574.000	1457.100	9621.000	1457.300	9668.000	1456.300	9683.000	1455.600	9700.000
GR	1455.500	9710.000	1455.200	9716.000	1456.200	9730.000	1456.600	9748.000	1455.600	9758.000
GR	1457.000	9776.000	1456.900	9798.000	1455.500	9823.000	1456.000	9852.000	1455.400	9887.000
GR	1455.500	9917.000	1455.100	9932.000	1454.300	9952.000	1455.200	9975.000	1456.300	9985.000
GR	1454.900	9990.000	1449.500	10000.000	1449.900	10016.000	1455.000	10018.000	1456.000	10025.000
GR	1456.100	10035.000	1455.400	10061.000	1454.900	10105.000	1455.200	10165.000	1455.200	10224.000
GR	1455.000	10267.000	1455.400	10316.000	1455.400	10363.000	1455.900	10405.000	1455.900	10458.000
GR	1456.300	10486.000	1460.500	10502.000	1464.400	10525.000	1468.300	10549.000	1469.900	10572.000
GR	1474.200	10608.000	1476.600	10648.000	.000	.000	.000	.000	.000	.000
X1	.782	48.000	9966.000	10032.000	380.000	360.000	380.000	.000	.000	.000
GR	1465.200	9401.000	1466.000	9455.000	1464.800	9494.000	1464.300	9529.000	1464.300	9559.000
GR	1464.100	9606.000	1462.800	9651.000	1460.600	9689.000	1458.800	9738.000	1457.400	9784.000
GR	1456.200	9827.000	1456.900	9865.000	1456.900	9891.000	1456.400	9909.000	1456.400	9934.000
GR	1457.100	9966.000	1454.600	9985.000	1454.500	10000.000	1454.800	10016.000	1459.800	10032.000
GR	1456.200	10044.000	1454.800	10058.000	1456.400	10082.000	1456.300	10116.000	1456.200	10153.000
GR	1457.000	10175.000	1463.500	10188.000	1463.200	10199.000	1458.200	10208.000	1457.200	10219.000
GR	1456.500	10262.000	1456.900	10308.000	1456.600	10356.000	1456.500	10404.000	1456.800	10457.000
GR	1457.400	10510.000	1458.800	10564.000	1458.100	10609.000	1464.200	10632.000	1469.600	10656.000
GR	1470.800	10676.000	1469.300	10687.000	1469.900	10699.000	1470.700	10715.000	1471.300	10737.000
GR	1475.600	10754.000	1478.200	10775.000	1479.300	10792.000	.000	.000	.000	.000

X1	.890	51.000	9971.000	10014.000	740.000	400.000	570.000	.000	.000	.000
GR	1474.800	8814.000	1474.000	8871.000	1471.500	8924.000	1469.400	8956.000	1466.600	8987.000
GR	1466.000	9000.000	1465.000	9003.000	1464.300	9029.000	1464.200	9045.000	1463.900	9067.000
GR	1463.000	9106.000	1462.300	9172.000	1460.900	9240.000	1461.400	9304.000	1460.800	9366.000
GR	1460.300	9431.000	1459.900	9498.000	1460.100	9549.000	1460.200	9605.000	1459.600	9673.000
GR	1459.700	9743.000	1459.700	9813.000	1459.700	9875.000	1459.000	9900.000	1457.900	9910.000
GR	1457.300	9915.000	1458.900	9919.000	1459.100	9931.000	1458.500	9941.000	1459.000	9950.000
GR	1460.300	9971.000	1454.000	9987.000	1454.800	10000.000	1458.900	10014.000	1458.300	10030.000
GR	1458.100	10049.000	1458.300	10066.000	1458.500	10094.000	1459.600	10109.000	1459.600	10110.000
GR	1459.700	10113.000	1460.800	10147.000	1461.000	10176.000	1460.400	10195.000	1460.500	10215.000
GR	1462.500	10230.000	1465.200	10260.000	1468.100	10289.000	1472.700	10329.000	1477.600	10376.000
GR	1479.400	10402.000	.000	.000	.000	.000	.000	.000	.000	.000
X1	.985	54.000	9978.000	10019.000	600.000	490.000	502.000	.000	.000	.000
GR	1480.500	8830.000	1480.300	8883.000	1479.200	8936.000	1478.300	8998.000	1476.200	9044.000
GR	1474.000	9095.000	1471.800	9127.000	1467.600	9159.000	1464.600	9178.000	1466.700	9185.000
GR	1465.000	9189.000	1464.600	9226.000	1463.800	9279.000	1464.200	9337.000	1463.300	9397.000
GR	1463.400	9455.000	1462.800	9522.000	1462.700	9591.000	1462.800	9663.000	1462.800	9714.000
GR	1463.200	9759.000	1463.100	9802.000	1463.400	9849.000	1462.000	9862.000	1459.500	9874.000
GR	1460.300	9878.000	1461.200	9883.000	1460.900	9891.000	1459.900	9903.000	1459.600	9913.000
GR	1458.900	9918.000	1461.500	9923.000	1461.200	9930.000	1459.000	9933.000	1459.900	9942.000
GR	1461.800	9951.000	1461.300	9963.000	1461.200	9978.000	1459.000	9986.000	1458.500	9989.000
GR	1458.100	10000.000	1459.700	10008.000	1459.600	10015.000	1461.500	10019.000	1461.800	10025.000
GR	1460.900	10047.000	1461.700	10056.000	1462.100	10074.000	1464.200	10103.000	1466.100	10143.000
GR	1468.700	10185.000	1470.900	10226.000	1472.200	10248.000	1475.900	10275.000	.000	.000
X1	1.120	52.000	9974.000	10037.000	640.000	730.000	713.000	.000	.000	.000
X3	.000	.000	.000	9034.000	1472.100	.000	.000	.000	.000	.000
GR	1477.900	8631.000	1475.600	8673.000	1473.100	8729.000	1469.700	8778.000	1467.300	8800.000
GR	1466.800	8815.000	1466.400	8852.000	1466.300	8893.000	1464.900	8894.000	1467.000	8918.000
GR	1470.300	8949.000	1471.200	8993.000	1472.100	9034.000	1471.300	9076.000	1468.600	9113.000
GR	1467.700	9148.000	1467.600	9191.000	1468.100	9243.000	1467.900	9281.000	1468.300	9294.000
GR	1469.200	9305.000	1468.600	9333.000	1469.300	9348.000	1470.300	9360.000	1470.500	9380.000
GR	1470.100	9419.000	1469.300	9460.000	1469.000	9504.000	1468.200	9557.000	1467.900	9610.000
GR	1467.300	9674.000	1467.000	9734.000	1466.900	9796.000	1466.200	9854.000	1465.500	9897.000
GR	1463.500	9942.000	1463.800	9974.000	1463.500	9990.000	1461.100	10000.000	1461.100	10027.000
GR	1465.100	10037.000	1464.900	10050.000	1464.200	10058.000	1463.600	10064.000	1465.200	10076.000
GR	1466.300	10097.000	1467.300	10116.000	1467.500	10123.000	1469.800	10141.000	1470.600	10158.000
GR	1471.600	10184.000	1471.000	10194.000	.000	.000	.000	.000	.000	.000
X1	1.207	29.000	9997.000	10030.000	450.000	480.000	459.000	.000	.000	.000
GR	1471.300	9479.000	1470.900	9520.000	1469.600	9537.000	1471.200	9556.000	1470.400	9584.000
GR	1470.300	9604.000	1471.500	9633.000	1470.900	9665.000	1468.900	9685.000	1469.800	9708.000
GR	1469.800	9726.000	1471.300	9750.000	1471.500	9784.000	1470.000	9812.000	1468.100	9832.000
GR	1466.700	9853.000	1468.400	9862.000	1467.400	9891.000	1467.200	9920.000	1466.800	9953.000
GR	1467.300	9986.000	1466.500	9997.000	1463.000	10000.000	1463.000	10019.000	1466.000	10030.000
GR	1466.000	10037.000	1467.300	10047.000	1474.700	10069.000	1480.400	10099.000	.000	.000

X1	1.288	59.000	9994.000	10032.000	380.000	440.000	428.000	.000	.000	.000
X3	.000	.000	.000	9785.000	1471.600	.000	.000	.000	.000	.000
GR	1478.300	8665.000	1478.300	8665.000	1479.200	8696.000	1478.800	8709.000	1478.000	8710.000
GR	1478.000	8735.000	1479.100	8738.000	1478.000	8768.000	1477.900	8810.000	1477.500	8864.000
GR	1477.600	8926.000	1477.400	8986.000	1477.100	9051.000	1477.400	9107.000	1477.600	9173.000
GR	1477.200	9244.000	1478.300	9296.000	1478.700	9324.000	1478.400	9349.000	1477.000	9388.000
GR	1475.900	9440.000	1475.400	9503.000	1473.800	9552.000	1472.900	9571.000	1473.800	9587.000
GR	1473.500	9605.000	1471.300	9624.000	1470.600	9653.000	1470.600	9688.000	1470.200	9716.000
GR	1469.300	9729.000	1471.000	9750.000	1471.600	9785.000	1470.800	9812.000	1470.400	9822.000
GR	1471.100	9832.000	1470.100	9850.000	1470.200	9867.000	1470.200	9876.000	1471.000	9892.000
GR	1470.200	9915.000	1467.700	9939.000	1468.700	9956.000	1468.500	9971.000	1469.000	9983.000
GR	1469.100	9994.000	1465.500	10000.000	1465.800	10020.000	1469.200	10024.000	1470.200	10032.000
GR	1469.400	10047.000	1468.000	10050.000	1469.300	10057.000	1470.000	10072.000	1471.500	10092.000
GR	1474.500	10129.000	1475.600	10166.000	1478.800	10199.000	1479.600	10232.000	.000	.000
X1	1.383	41.000	9992.000	10030.000	470.000	510.000	502.000	.000	.000	.000
X3	.000	.000	.000	9720.000	1475.100	.000	.000	.000	.000	.000
GR	1480.600	8985.000	1480.800	9002.000	1478.900	9003.000	1479.000	9027.000	1480.100	9032.000
GR	1480.200	9062.000	1480.200	9110.000	1479.900	9168.000	1479.600	9224.000	1479.900	9281.000
GR	1479.900	9340.000	1479.900	9398.000	1479.400	9432.000	1479.000	9434.000	1475.600	9469.000
GR	1473.600	9494.000	1473.500	9517.000	1474.000	9548.000	1474.300	9590.000	1475.100	9627.000
GR	1474.800	9671.000	1475.100	9720.000	1475.000	9767.000	1474.400	9805.000	1474.300	9823.000
GR	1473.900	9855.000	1473.600	9898.000	1472.600	9933.000	1471.200	9964.000	1471.800	9981.000
GR	1471.900	9992.000	1469.500	9998.000	1467.200	10000.000	1468.100	10022.000	1472.600	10030.000
GR	1472.600	10038.000	1472.100	10049.000	1475.900	10071.000	1484.100	10110.000	1495.600	10168.000
GR	1508.800	10219.000	.000	.000	.000	.000	.000	.000	.000	.000
QT	4.000	1175.000	1467.000	1609.000	1958.000	.000	.000	.000	.000	.000
X1	1.483	54.000	9971.000	10025.000	530.000	528.000	528.000	.000	.000	.000
X3	.000	.000	.000	9791.000	1478.900	.000	.000	.000	.000	.000
GR	1480.200	8977.000	1480.400	9018.000	1480.700	9075.000	1479.500	9100.000	1478.600	9142.000
GR	1478.600	9178.000	1478.600	9201.000	1477.600	9203.000	1478.500	9218.000	1478.200	9235.000
GR	1478.200	9255.000	1478.000	9280.000	1479.300	9293.000	1478.600	9318.000	1478.100	9354.000
GR	1478.300	9368.000	1479.400	9373.000	1478.800	9405.000	1478.400	9434.000	1477.300	9452.000
GR	1477.600	9476.000	1477.500	9486.000	1478.000	9505.000	1478.400	9526.000	1478.400	9548.000
GR	1477.800	9576.000	1476.400	9604.000	1476.700	9613.000	1477.100	9649.000	1476.600	9679.000
GR	1475.700	9704.000	1476.300	9718.000	1477.000	9734.000	1478.400	9764.000	1478.900	9791.000
GR	1478.700	9814.000	1478.100	9836.000	1476.500	9857.000	1477.100	9887.000	1477.000	9916.000
GR	1476.700	9947.000	1476.200	9971.000	1474.100	9991.000	1470.000	10000.000	1470.200	10017.000
GR	1473.100	10021.000	1474.300	10025.000	1474.400	10036.000	1474.700	10058.000	1475.100	10074.000
GR	1476.300	10095.000	1480.100	10118.000	1488.400	10152.000	1499.300	10217.000	.000	.000
X1	1.572	54.000	9985.000	10020.000	410.000	500.000	470.000	.000	.000	.000
X3	.000	.000	.000	9698.000	1480.900	.000	.000	.000	.000	.000
GR	1480.400	8828.000	1480.900	8873.000	1480.300	8921.000	1480.300	8939.000	1478.600	8941.000
GR	1478.600	8972.000	1479.600	8976.000	1479.800	9002.000	1479.600	9039.000	1480.000	9077.000
GR	1480.100	9119.000	1480.000	9180.000	1479.300	9241.000	1479.500	9294.000	1478.300	9324.000
GR	1478.800	9350.000	1478.800	9385.000	1478.300	9430.000	1477.900	9472.000	1478.500	9507.000
GR	1477.800	9517.000	1479.400	9527.000	1479.300	9543.000	1479.200	9568.000	1479.400	9597.000
GR	1479.100	9604.000	1478.500	9644.000	1479.400	9658.000	1480.900	9698.000	1480.600	9742.000
GR	1479.900	9785.000	1480.100	9832.000	1478.900	9867.000	1477.400	9899.000	1476.100	9923.000
GR	1476.100	9945.000	1476.300	9968.000	1477.400	9985.000	1476.500	9994.000	1475.100	9998.000
GR	1473.700	10000.000	1474.000	10005.000	1474.200	10015.000	1476.500	10020.000	1476.300	10026.000

GR	1476.900	10046.000	1477.400	10072.000	1477.800	10103.000	1478.000	10141.000	1479.400	10176.000
GR	1480.500	10209.000	1482.000	10221.000	1485.000	10243.000	1489.500	10271.000	.000	.000
X1	1.638	31.000	9970.000	10020.000	360.000	330.000	350.000	.000	.000	.000
X3	.000	.000	.000	9583.000	1483.000	.000	.000	.000	.000	.000
GR	1484.100	9019.000	1484.300	9104.000	1484.000	9186.000	1483.600	9263.000	1482.600	9306.000
GR	1481.300	9347.000	1480.900	9424.000	1480.500	9461.000	1482.000	9483.000	1481.300	9495.000
GR	1483.000	9516.000	1483.000	9583.000	1482.900	9671.000	1482.900	9750.000	1481.900	9810.000
GR	1480.500	9849.000	1479.300	9907.000	1478.600	9933.000	1478.800	9949.000	1479.500	9970.000
GR	1475.700	9984.000	1475.700	10000.000	1479.800	10020.000	1479.700	10052.000	1480.300	10084.000
GR	1479.900	10100.000	1482.100	10122.000	1482.500	10140.000	1485.400	10167.000	1488.400	10194.000
GR	1488.700	10203.000	.000	.000	.000	.000	.000	.000	.000	.000
X1	1.695	47.000	9978.000	10016.000	297.000	303.000	300.000	.000	.000	.000
X3	.000	.000	.000	9830.000	1485.200	.000	.000	.000	.000	.000
GR	1484.700	9053.000	1486.000	9100.000	1486.000	9135.000	1486.700	9183.000	1485.500	9275.000
GR	1483.600	9300.000	1482.300	9338.000	1482.700	9371.000	1483.100	9414.000	1481.400	9426.000
GR	1481.500	9450.000	1482.400	9463.000	1484.100	9474.000	1484.300	9506.000	1484.600	9547.000
GR	1483.400	9609.000	1483.100	9660.000	1482.200	9713.000	1482.300	9735.000	1483.200	9749.000
GR	1484.000	9773.000	1483.900	9791.000	1484.200	9814.000	1485.200	9830.000	1483.700	9868.000
GR	1483.500	9887.000	1481.600	9906.000	1480.200	9926.000	1480.500	9952.000	1481.500	9978.000
GR	1477.300	9992.000	1477.400	10000.000	1477.400	10008.000	1481.300	10016.000	1480.700	10039.000
GR	1480.800	10056.000	1481.500	10086.000	1480.400	10110.000	1481.400	10120.000	1481.600	10142.000
GR	1482.400	10177.000	1483.900	10212.000	1485.100	10249.000	1485.900	10285.000	1486.300	10320.000
GR	1487.000	10350.000	1487.300	10362.000	.000	.000	.000	.000	.000	.000
X1	1.761	50.000	9980.000	10017.000	360.000	340.000	350.000	.000	.000	.000
X3	.000	.000	.000	9482.000	1489.800	.000	.000	.000	.000	.000
GR	1489.400	9067.000	1488.200	9110.000	1486.900	9152.000	1487.300	9190.000	1487.200	9232.000
GR	1487.000	9274.000	1486.600	9308.000	1485.500	9317.000	1487.300	9327.000	1486.400	9361.000
GR	1486.600	9397.000	1484.200	9405.000	1487.000	9428.000	1488.900	9453.000	1489.800	9482.000
GR	1489.500	9517.000	1489.500	9557.000	1488.900	9599.000	1488.000	9639.000	1487.600	9678.000
GR	1486.400	9718.000	1486.100	9758.000	1486.300	9800.000	1487.600	9839.000	1487.900	9874.000
GR	1487.500	9905.000	1485.500	9931.000	1482.900	9958.000	1483.200	9980.000	1479.100	9988.000
GR	1479.100	10000.000	1479.200	10008.000	1483.200	10017.000	1483.300	10052.000	1484.000	10091.000
GR	1484.000	10122.000	1483.300	10159.000	1484.000	10200.000	1484.500	10238.000	1484.400	10280.000
GR	1484.400	10319.000	1484.800	10342.000	1483.200	10355.000	1485.400	10371.000	1486.000	10410.000
GR	1486.100	10453.000	1487.000	10496.000	1487.700	10542.000	1488.400	10582.000	1488.800	10614.000
X1	1.856	56.000	9980.000	10019.000	502.000	502.000	502.000	.000	.000	.000
X3	.000	.000	.000	9707.000	1492.500	.000	.000	.000	.000	.000
GR	1493.600	8602.000	1493.600	8647.000	1493.800	8687.000	1493.200	8733.000	1490.900	8767.000
GR	1490.000	8790.000	1489.900	8829.000	1488.900	8866.000	1490.500	8878.000	1489.800	8904.000
GR	1490.000	8933.000	1490.000	8970.000	1490.700	9013.000	1491.000	9047.000	1492.000	9088.000
GR	1491.600	9128.000	1491.500	9170.000	1491.100	9215.000	1490.900	9253.000	1491.300	9296.000
GR	1490.300	9333.000	1490.400	9375.000	1491.200	9417.000	1492.300	9455.000	1492.300	9495.000
GR	1492.100	9538.000	1492.200	9581.000	1492.300	9624.000	1492.600	9666.000	1492.500	9707.000
GR	1492.400	9750.000	1491.900	9791.000	1490.500	9830.000	1489.300	9865.000	1487.900	9901.000
GR	1486.700	9941.000	1484.500	9980.000	1480.700	9989.000	1480.900	10000.000	1480.900	10009.000
GR	1485.200	10019.000	1485.100	10038.000	1487.500	10065.000	1489.300	10093.000	1489.800	10123.000
GR	1489.500	10155.000	1488.200	10182.000	1487.600	10219.000	1488.600	10257.000	1488.400	10300.000
GR	1488.900	10340.000	1489.300	10381.000	1490.400	10402.000	1493.200	10419.000	1498.700	10460.000
GR	1500.900	10473.000	.000	.000	.000	.000	.000	.000	.000	.000

X1	1.951	33.000	9981.000	10011.000	510.000	495.000	502.000	.000	.000	.000
X3	.000	.000	.000	9417.000	1497.000	.000	.000	.000	.000	.000
GR	1496.600	9241.000	1496.400	9296.000	1496.900	9357.000	1497.000	9417.000	1496.600	9498.000
GR	1496.300	9579.000	1495.500	9661.000	1495.000	9741.000	1494.800	9806.000	1493.900	9858.000
GR	1492.300	9881.000	1488.800	9909.000	1485.900	9938.000	1486.300	9965.000	1486.700	9981.000
GR	1483.100	9989.000	1482.900	10000.000	1483.000	10006.000	1486.100	10011.000	1489.200	10026.000
GR	1491.000	10061.000	1490.900	10099.000	1490.800	10145.000	1491.000	10190.000	1491.200	10242.000
GR	1492.100	10289.000	1493.100	10339.000	1494.100	10388.000	1494.800	10429.000	1495.500	10457.000
GR	1502.000	10488.000	1505.700	10523.000	1508.700	10544.000	.000	.000	.000	.000
X1	2.045	34.000	9988.000	10019.000	505.000	510.000	505.000	.000	.000	.000
GR	1499.600	9478.000	1499.200	9519.000	1498.900	9562.000	1499.000	9607.000	1498.700	9640.000
GR	1497.800	9681.000	1497.400	9721.000	1496.900	9765.000	1496.300	9806.000	1494.600	9840.000
GR	1491.100	9867.000	1490.300	9911.000	1489.500	9949.000	1489.500	9963.000	1490.900	9978.000
GR	1490.900	9988.000	1486.600	9995.000	1486.700	10000.000	1486.600	10010.000	1491.200	10019.000
GR	1490.100	10048.000	1488.000	10057.000	1490.900	10066.000	1490.700	10094.000	1491.700	10120.000
GR	1492.000	10158.000	1492.400	10199.000	1493.200	10238.000	1493.900	10280.000	1493.600	10321.000
GR	1493.700	10360.000	1494.200	10384.000	1502.100	10422.000	1502.700	10425.000	.000	.000
QT	4.000	1065.000	1253.000	1308.000	1407.000	.000	.000	.000	.000	.000
X1	2.121	29.000	9980.000	10019.000	405.000	415.000	410.000	.000	.000	.000
X3	.000	.000	.000	.000	.000	10133.000	1497.100	.000	.000	.000
GR	1503.600	9596.000	1502.300	9639.000	1502.200	9681.000	1501.800	9722.000	1501.300	9768.000
GR	1500.500	9813.000	1499.700	9853.000	1498.400	9888.000	1496.700	9921.000	1492.800	9947.000
GR	1492.100	9980.000	1488.700	9990.000	1489.300	10000.000	1490.500	10010.000	1493.600	10019.000
GR	1493.000	10048.000	1494.800	10079.000	1496.400	10110.000	1497.100	10133.000	1496.500	10164.000
GR	1495.400	10204.000	1494.700	10243.000	1493.800	10281.000	1493.000	10322.000	1494.000	10365.000
GR	1495.300	10404.000	1497.400	10443.000	1500.700	10486.000	1502.000	10504.000	.000	.000
X1	2.200	33.000	9959.000	10036.000	400.000	425.000	417.000	.000	.000	.000
X3	.000	.000	.000	.000	.000	10036.000	1498.500	.000	.000	.000
GR	1502.000	9511.000	1500.400	9566.000	1498.800	9612.000	1496.900	9654.000	1495.700	9701.000
GR	1494.200	9741.000	1494.100	9781.000	1493.000	9811.000	1494.700	9824.000	1493.500	9837.000
GR	1493.400	9863.000	1493.100	9891.000	1495.600	9903.000	1495.300	9930.000	1496.100	9959.000
GR	1495.000	9970.000	1491.500	9981.000	1491.400	10000.000	1490.500	10017.000	1498.500	10036.000
GR	1498.100	10053.000	1495.700	10067.000	1496.100	10101.000	1496.300	10141.000	1496.300	10178.000
GR	1496.600	10215.000	1497.000	10253.000	1497.000	10291.000	1499.800	10328.000	1502.700	10364.000
GR	1505.100	10405.000	1509.400	10447.000	1509.300	10447.000	.000	.000	.000	.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=    .100 CEHV=    .300
#SECNO  .710

3265 DIVIDED FLOW

      .71     7.00  1456.50  1455.80  1456.50  1456.56      .06      .00      .00  1456.30
    1422.     296.     480.     646.     240.     171.     501.       0.       0.   1456.00
      .00     1.23     2.80     1.29     .055     .055     .055     .000  1449.50  9680.00
  .001814       0.       0.       0.        0       12        0      .00   765.69 10486.76
0
#SECNO  .782

3265 DIVIDED FLOW

      .78     2.99  1457.49  1457.06      .00  1457.57      .08     1.01      .01  1457.10
    1422.     240.     413.     770.     148.     133.     424.       7.       6.   1459.80
      .05     1.61     3.11     1.82     .055     .055     .055     .000  1454.50  9780.79
  .004512     380.     380.     360.        1       16        0      .00   752.60 10588.15
0
#SECNO  .890

3265 DIVIDED FLOW

      .89     5.99  1459.99  1459.33      .00  1460.21      .22     2.60      .04  1460.30
    1422.     272.     762.     388.     165.     162.     148.      14.      15.   1458.90
      .09     1.65     4.70     2.63     .055     .055     .055     .000  1454.00  9483.36
  .005308     740.     570.     400.        3       15        0      .00   523.89 10121.88
0
#SECNO  .985
      .99     4.55  1462.65  1461.63      .00  1462.83      .18     2.62      .00  1461.20
    1422.     734.     566.     122.     240.     139.      62.      20.      19.   1461.50
      .13     3.06     4.06     1.96     .055     .055     .055     .000  1458.10  9855.94
  .004546     600.     502.     490.        2       11        0      .00   225.69 10081.63
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


#SECNO 1.120

3470 ENCROACHMENT STATIONS=    9034.0   10194.0  TYPE=     1  TARGET=   -9034.000
 ELENCL=   1472.10  ELENCR= 100000.00
     1.12     4.71  1465.81  1464.71      .00  1466.04      .23     3.19      .01  1463.80
    1422.     348.     960.     114.     131.     224.      53.      26.      23.   1465.10
      .18     2.65     4.29     2.17     .055     .055     .055     .000  1461.10  9877.94
  .004746     640.     713.     730.        3       15        0      .00   209.70 10087.65
0
#SECNO 1.207

3265 DIVIDED FLOW

     1.21     5.29  1468.29  1467.86      .00  1468.69      .40     2.60      .05  1466.50
    1422.     391.     915.     115.     164.     153.      34.      30.      25.   1466.00
      .21     2.38     5.99     3.40     .055     .055     .055     .000  1463.00  9830.01
  .006896     450.     459.     480.        2        8        0      .00   216.10 10049.94
0
#SECNO 1.288

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    9785.0   10232.0  TYPE=     1  TARGET=   -9785.000
 ELENCL=   1471.60  ELENCR= 100000.00
     1.29     5.38  1470.88  1469.95      .00  1471.09      .21     2.39      .02  1469.10
    1422.     599.     675.     148.     212.     149.      62.      34.      27.   1470.20
      .24     2.83     4.53     2.38     .055     .055     .055     .000  1465.50  9809.30
  .004920     380.     428.     440.        2       12        0      .00   261.50 10083.74
0
#SECNO 1.383

3470 ENCROACHMENT STATIONS=    9720.0   10219.0  TYPE=     1  TARGET=   -9720.000
 ELENCL=   1475.10  ELENCR= 100000.00
     1.38     6.27  1473.47  1472.67      .00  1473.89      .42     2.74      .06  1471.90
    1422.     326.    1045.      52.     114.     180.      25.      38.      30.   1472.60
      .27     2.87     5.80     2.08     .055     .055     .055     .000  1467.20  9902.37
  .006348     470.     502.     510.        2        5        0      .00   154.60 10056.96
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


 #SECNO 1.483

 3265 DIVIDED FLOW


 3470 ENCROACHMENT STATIONS=    9791.0   10217.0  TYPE=     1  TARGET=   -9791.000
  ELENCL=   1478.90  ELENCR= 100000.00
      1.48     6.50  1476.50  1475.11      .00  1476.75      .24     2.84      .02  1476.20
     1175.       1.     891.     283.       2.     207.     109.      42.      31.   1474.30
       .31      .52     4.31     2.59     .055     .055     .055     .000  1470.00  9856.94
   .004475     530.     528.     528.        2       12        0      .00   140.13 10096.24
0
 #SECNO 1.572

 3470 ENCROACHMENT STATIONS=    9698.0   10271.0  TYPE=     1  TARGET=   -9698.000
  ELENCL=   1480.90  ELENCR= 100000.00
      1.57     4.81  1478.51  1477.52      .00  1478.64      .13     1.88      .01  1477.40
     1175.     487.     414.     274.     190.     116.     141.      46.      34.   1476.50
       .35     2.57     3.56     1.94     .055     .055     .055     .000  1473.70  9875.31
   .003661     410.     470.     500.        3       14        0      .00   278.45 10153.76
0
 #SECNO 1.638

 3265 DIVIDED FLOW


 3470 ENCROACHMENT STATIONS=    9583.0   10203.0  TYPE=     1  TARGET=   -9583.000
  ELENCL=   1483.00  ELENCR= 100000.00
      1.64     4.54  1480.24  1479.79      .00  1480.60      .36     1.89      .07  1479.50
     1175.     278.     862.      35.     102.     159.      26.      49.      36.   1479.80
       .38     2.71     5.41     1.33     .055     .055     .055     .000  1475.70  9861.54
   .008750     360.     350.     330.        2       15        0      .00   236.30 10103.40
0
 #SECNO 1.695

 3470 ENCROACHMENT STATIONS=    9830.0   10362.0  TYPE=     1  TARGET=   -9830.000
  ELENCL=   1485.20  ELENCR= 100000.00
      1.70     4.95  1482.25  1481.66      .00  1482.43      .17     1.81      .02  1481.50
     1175.     267.     594.     315.     112.     141.     159.      51.      37.   1481.30
       .40     2.39     4.20     1.98     .055     .055     .055     .000  1477.30  9899.43
   .004413     297.     300.     303.        2       10        0      .00   271.33 10170.76
0
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   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 1.761

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    9482.0   10614.0  TYPE=     1  TARGET=   -9482.000
 ELENCL=   1489.80  ELENCR= 100000.00
     1.76     5.03  1484.13  1483.98      .00  1484.61      .48     2.09      .09  1483.20
    1175.      77.     929.     170.      32.     150.      98.      54.      40.   1483.20
      .42     2.43     6.18     1.73     .055     .055     .055     .000  1479.10  9945.23
  .008591     360.     350.     340.        1        5        0      .00   278.91 10361.76
0
#SECNO 1.856

3470 ENCROACHMENT STATIONS=    9707.0   10473.0  TYPE=     1  TARGET=   -9707.000
 ELENCL=   1492.50  ELENCR= 100000.00
     1.86     6.29  1486.99  1484.82      .00  1487.28      .29     2.65      .02  1484.50
    1175.     110.     949.     116.      56.     202.      55.      58.      42.   1485.20
      .45     1.97     4.70     2.11     .055     .055     .055     .000  1480.70  9931.19
  .003565     502.     502.     502.        2        8        0      .00   128.12 10059.31
0
#SECNO 1.951

3470 ENCROACHMENT STATIONS=    9417.0   10544.0  TYPE=     1  TARGET=   -9417.000
 ELENCL=   1497.00  ELENCR= 100000.00
     1.95     5.94  1488.84  1487.43      .00  1489.09      .25     1.80      .00  1486.70
    1175.     433.     706.      36.     155.     153.      18.      61.      43.   1486.10
      .49     2.80     4.63     1.97     .055     .055     .055     .000  1482.90  9908.67
  .003600     510.     502.     495.        3       16        0      .00   115.59 10024.26
0
#SECNO 2.045
     2.05     4.77  1491.37  1490.98      .00  1491.65      .27     2.55      .01  1490.90
    1175.     370.     586.     218.     134.     111.      81.      65.      45.   1491.20
      .52     2.76     5.26     2.69     .055     .055     .055     .000  1486.60  9864.89
  .007577     505.     505.     510.        2       13        0      .00   246.61 10111.50
0
#SECNO 2.121

3470 ENCROACHMENT STATIONS=        .0   10133.0  TYPE=     1  TARGET=   10133.000
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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

     2.12     5.49  1494.19  1493.34      .00  1494.55      .36     2.88      .02  1492.10
    1065.     192.     803.     71.      64.     152.      38.      68.      47.   1493.60
      .55     3.00     5.28     1.86     .055     .055     .055     .000  1488.70  9937.73
  .006482     405.     410.     415.       3        8        0      .00   130.77 10068.50
0
 $SECNO 2.200

 3265 DIVIDED FLOW


 3470 ENCROACHMENT STATIONS=        .0   10036.0  TYPE=     1  TARGET=   10036.000
     2.20     5.16  1495.66  1494.10      .00  1495.72      .06     1.15      .03  1496.10
    1065.     547.     518.      0.     348.     221.       0.      72.      49.   1498.50
      .61     1.57     2.34     .00     .055     .055     .055     .000  1490.50  9701.73
  .001548     400.     417.     425.       3       18        0      .00   307.79 10029.28
0
```

THIS RUN EXECUTED 11/23/87 15:33:59

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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 1.1
**************************************************
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T1 FLOODPLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DISTRICT
T2 50 YEAR FLOOD EVENT - BASED ON 6-HR RAINFALL
T3 BUCHANAN WASH - SKUNK CREEK TO C.A.P. CANAL SEPTEMBER, 1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	3.	0.	0.	.000000	.00	.0	0.	1458.930	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	.000	-1.000	.000	.000	.000	-1.000	.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 2

 CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

 CCHV=    .100 CEHV=    .300
 #SECNO  .710
      .71     9.43  1458.93  1456.00  1458.93  1458.94      .01      .00      .00  1456.30
    2005.     721.     243.    1041.    1304.     269.    1635.       0.       0.   1456.00
      .00      .55      .90      .64     .055     .055     .055     .000  1449.50  9478.50
  .000104       0.       0.       0.        0       20        0      .00  1017.52 10496.02
0
 #SECNO  .782

 3265 DIVIDED FLOW

      .78     4.49  1458.99  1457.19      .00  1459.01      .02      .07      .00  1457.10
    2005.     451.     300.    1254.     462.     224.    1226.      22.       8.   1459.80
      .10      .98     1.34     1.02     .055     .055     .055     .000  1454.50  9732.76
  .000465     380.     380.     360.        2       17        0      .00   846.75 10612.37
0
 #SECNO  .890

 3265 DIVIDED FLOW


 3301 HV CHANGED MORE THAN HVINS

 7185 MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED
      .89     5.85  1459.85  1459.85      .00  1460.42      .57      .70      .17  1460.30
    2005.     316.    1155.     534.     120.     157.     134.      35.      16.   1458.90
      .12     2.63     7.38     4.00     .055     .055     .055     .000  1454.00  9644.11
  .013560     740.     570.     400.        0       11        0      .00   465.35 10117.79
0
 #SECNO  .985

 3265 DIVIDED FLOW

      .99     5.27  1463.36  1462.03      .00  1463.49      .13     3.02      .04  1461.20
    2005.    1129.     639.     236.     495.     169.     111.      43.      24.   1461.50
      .18     2.28     3.79     2.14     .055     .055     .055     .000  1458.10  9392.68
  .003077     600.     502.     490.        5       20        0      .00   668.63 10091.47
0
```

```
   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 1.120

 3470 ENCROACHMENT STATIONS=    9034.0   10194.0  TYPE=     1  TARGET=   -9034.000
  ELENCL=   1472.10  ELENCR= 100000.00
      1.12     5.03  1466.13  1465.19      .00  1466.45      .32     2.90      .06  1463.80
     2005.     540.    1271.     194.     165.     244.     70.      53.      31.   1465.10
       .22     3.27     5.20     2.77     .055     .055    .055     .000  1461.10  9858.00
   .006214     640.     713.     730.        3       15       0      .00   235.84 10093.84
0
 *SECNO 1.207
      1.21     5.90  1468.90  1468.29      .00  1469.27      .37     2.80      .01  1466.50
     2005.     780.    1051.     173.     268.     173.     47.      58.      33.   1466.00
       .25     2.92     6.08     3.73     .055     .055    .055     .000  1463.00  9823.61
   .006027     450.     459.     480.        3        8       0      .00   228.13 10051.75
0
 *SECNO 1.288

 3470 ENCROACHMENT STATIONS=    9785.0   10232.0  TYPE=     1  TARGET=   -9785.000
  ELENCL=   1471.60  ELENCR= 100000.00
      1.29     5.83  1471.33  1470.42      .00  1471.57      .25     2.29      .01  1469.10
     2005.     928.     834.     243.     296.     166.     86.      62.      35.   1470.20
       .28     3.13     5.02     2.82     .055     .055    .055     .000  1465.50  9794.22
   .005235     380.     428.     440.        2       12       0      .00   295.47 10089.69
0
 *SECNO 1.383

 3470 ENCROACHMENT STATIONS=    9720.0   10219.0  TYPE=     1  TARGET=   -9720.000
  ELENCL=   1475.10  ELENCR= 100000.00
      1.38     6.85  1474.05  1473.22      .00  1474.52      .47     2.88      .07  1471.90
     2005.     597.    1293.     115.     182.     202.     41.      68.      38.   1472.60
       .30     3.29     6.40     2.78     .055     .055    .055     .000  1467.20  9842.78
   .006626     470.     502.     510.        2        8       0      .00   217.52 10060.31
0
 *SECNO 1.483

 3265 DIVIDED FLOW


 3470 ENCROACHMENT STATIONS=    9791.0   10217.0  TYPE=     1  TARGET=   -9791.000
```

```
   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


 ELENCL=   1478.90  ELENCR= 100000.00
     1.48     7.03  1477.03  1475.51      .00  1477.27      .24     2.73      .02  1476.20
    1467.      26.    1025.     416.      29.     235.     148.      73.      41.   1474.30
      .34      .89     4.36     2.81     .055     .055     .055     .000  1470.00  9850.00
  .003847     530.     528.     528.        2       15        0      .00   226.73 10099.44
0
 #SECNO 1.572

 3470 ENCROACHMENT STATIONS=    9698.0   10271.0  TYPE=     1  TARGET=   -9698.000
  ELENCL=   1480.90  ELENCR= 100000.00
     1.57     5.14  1478.84  1477.74      .00  1478.97      .13     1.69      .01  1477.40
    1467.     609.     467.     391.     227.     128.     186.      78.      44.   1476.50
      .39     2.69     3.66     2.11     .055     .055     .055     .000  1473.70  9868.39
  .003416     410.     470.     500.        2       14        0      .00   293.48 10161.87
0
 #SECNO 1.638

 3470 ENCROACHMENT STATIONS=    9583.0   10203.0  TYPE=     1  TARGET=   -9583.000
  ELENCL=   1483.00  ELENCR= 100000.00
     1.64     4.79  1480.49  1480.12      .00  1480.87      .39     1.83      .08  1479.50
    1467.     394.     988.      85.     131.     172.      48.      82.      46.   1479.80
      .41     3.00     5.74     1.79     .055     .055     .055     .000  1475.70  9849.38
  .008914     360.     350.     330.        2       12        0      .00   256.54 10105.92
0
 #SECNO 1.695

 3470 ENCROACHMENT STATIONS=    9830.0   10362.0  TYPE=     1  TARGET=   -9830.000
  ELENCL=   1485.20  ELENCR= 100000.00
     1.70     5.22  1482.53  1481.85      .00  1482.71      .19     1.82      .02  1481.50
    1467.     350.     666.     450.     133.     152.     202.      84.      48.   1481.30
      .43     2.63     4.39     2.23     .055     .055     .055     .000  1477.30  9896.70
  .004391     297.     300.     303.        2       10        0      .00   283.33 10180.03
0
 #SECNO 1.761

 3265 DIVIDED FLOW


 3470 ENCROACHMENT STATIONS=    9482.0   10614.0  TYPE=     1  TARGET=   -9482.000
```

```
   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


 ELENCL=   1489.80  ELENCR= 100000.00
     1.76     5.30  1484.40  1484.24      .00  1484.87      .47     2.08      .09  1483.20
    1467.     113.    1027.     327.      41.     160.     156.      88.      50.   1483.20
      .45     2.76     6.41     2.10     .055     .055     .055     .000  1479.10  9942.50
  .008523     360.     350.     340.        1        5        0      .00   305.66 10363.67
0
 ‡SECNO 1.856

 3470 ENCROACHMENT STATIONS=    9707.0   10473.0  TYPE=     1  TARGET=   -9707.000
  ELENCL=   1492.50  ELENCR= 100000.00
     1.86     6.66  1487.36  1485.73      .00  1487.69      .34     2.81      .01  1484.50
    1467.     175.    1118.     173.      76.     216.      71.      92.      53.   1485.20
      .48     2.31     5.17     2.46     .055     .055     .055     .000  1480.70  9919.07
  .003950     502.     502.     502.        2        8        0      .00   144.34 10063.40
0
 ‡SECNO 1.951

 3470 ENCROACHMENT STATIONS=    9417.0   10544.0  TYPE=     1  TARGET=   -9417.000
  ELENCL=   1497.00  ELENCR= 100000.00
     1.95     6.42  1489.32  1487.75      .00  1489.59      .27     1.89      .01  1486.70
    1467.     595.     815.      56.     190.     167.      25.      96.      54.   1486.10
      .51     3.13     4.89     2.23     .055     .055     .055     .000  1482.90  9904.85
  .003563     510.     502.     495.        3       16        0      .00   123.46 10028.31
0
 ‡SECNO 2.045
     2.05     5.12  1491.72  1491.14      .00  1491.97      .25     2.38      .00  1490.90
    1467.     520.     632.     315.     177.     122.     115.     101.      56.   1491.20
      .55     2.93     5.18     2.75     .055     .055     .055     .000  1486.60  9862.24
  .006495     505.     505.     510.        3       13        0      .00   259.97 10122.21
0
 ‡SECNO 2.121

 3470 ENCROACHMENT STATIONS=        .0   10133.0  TYPE=     1  TARGET=   10133.000
     2.12     5.68  1494.38  1493.67      .00  1494.78      .41     2.77      .05  1492.10
    1253.     241.     908.     104.      72.     159.      48.     104.      58.   1493.60
      .57     3.34     5.70     2.18     .055     .055     .055     .000  1488.70  9936.46
  .007083     405.     410.     415.        2        8        0      .00   135.31 10071.77
0
```

```
  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 2.200

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=       .0   10036.0  TYPE=     1  TARGET=   10036.000
     2.20     5.42  1495.92  1494.31      .00  1495.99      .06     1.17      .03  1496.10
    1253.     687.     566.      0.     412.     239.       0.     109.      61.   1498.50
      .63     1.67     2.37     .00     .055     .055     .055     .000  1490.50  9691.98
  .001530     400.     417.     425.       3       18        0      .00   330.06 10029.90
0
```

THIS RUN EXECUTED 11/23/87 15:36:19

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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 1.1
**************************************************
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T1 FLOODPLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DISTRICT
T2 100 YEAR FLOOD EVENT - BASED ON 6-HR RAINFALL
T3 BUCHANAN WASH - SKUNK CREEK TO C.A.P. CANAL SEPTEMBER, 1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	4.	0.	0.	.000000	.00	.0	0.	1460.420	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	3.000	.000	-1.000	.000	.000	.000	-1.000	.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 3

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
#SECNO  .710
      .71    10.92  1460.42  1456.08  1460.42  1460.42      .00      .00      .00  1456.30
    2304.     926.     211.    1167.    2089.     328.    2341.       0.       0.   1456.00
      .00      .44      .64      .50     .055     .055     .055     .000  1449.50  9436.73
  .000040       0.       0.       0.        0       17        0      .00  1064.97 10501.70
0
#SECNO  .782

3265 DIVIDED FLOW

      .78     5.94  1460.44  1457.27      .00  1460.45      .01      .02      .00  1457.10
    2304.     565.     272.    1467.     827.     318.    2030.      34.       8.   1459.80
      .14      .68      .85      .72     .055     .055     .055     .000  1454.50  9693.49
  .000125     380.     380.     360.        0       14        0      .00   902.21 10617.80
0
#SECNO  .890

3265 DIVIDED FLOW

      .89     6.51  1460.51  1460.07      .00  1460.71      .20      .20      .06  1460.30
    2304.     793.     894.     617.     429.     185.     210.      58.      19.   1458.90
      .19     1.85     4.85     2.94     .055     .055     .055     .000  1454.00  9403.45
  .004875     740.     570.     400.        2        5        0      .00   758.28 10215.09
0
#SECNO  .985

3265 DIVIDED FLOW

      .99     5.12  1463.22  1462.20      .00  1463.43      .21     2.72      .00  1461.20
    2304.    1265.     777.     263.     420.     163.     100.      67.      28.   1461.50
      .23     3.01     4.78     2.63     .055     .055     .055     .000  1458.10  9475.46
  .005132     600.     502.     490.        3       14        0      .00   583.56 10089.42
0
```

```
   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 1.120

3470 ENCROACHMENT STATIONS=    9034.0   10194.0  TYPE=     1  TARGET=   -9034.000
 ELENCL=   1472.10  ELENCR= 100000.00
     1.12     5.47  1466.57  1465.40      .00  1466.85      .28     3.40      .02  1463.80
    2304.     695.    1340.     269.     224.     272.      97.      77.      35.   1465.10
      .27     3.10     4.92     2.78     .055     .055     .055     .000  1461.10  9822.88
  .004823     640.     713.     730.        2       15        0      .00   279.35 10102.23
0
#SECNO 1.207

3265 DIVIDED FLOW

     1.21     6.05  1469.05  1468.48      .00  1469.46      .42     2.57      .04  1466.50
    2304.     948.    1155.     201.     294.     178.      50.      83.      38.   1466.00
      .30     3.22     6.49     4.04     .055     .055     .055     .000  1463.00  9683.53
  .006618     450.     459.     480.        2        5        0      .00   235.41 10052.20
0
#SECNO 1.288

3470 ENCROACHMENT STATIONS=    9785.0   10232.0  TYPE=     1  TARGET=   -9785.000
 ELENCL=   1471.60  ELENCR= 100000.00
     1.29     6.07  1471.57  1470.58      .00  1471.82      .25     2.34      .02  1469.10
    2304.    1112.     894.     297.     346.     175.     101.      89.      40.   1470.20
      .33     3.21     5.10     2.95     .055     .055     .055     .000  1465.50  9785.99
  .005026     380.     428.     440.        2       15        0      .00   306.88 10092.87
0
#SECNO 1.383

3470 ENCROACHMENT STATIONS=    9720.0   10219.0  TYPE=     1  TARGET=   -9720.000
 ELENCL=   1475.10  ELENCR= 100000.00
     1.38     7.07  1474.27  1473.50      .00  1474.77      .50     2.87      .07  1471.90
    2304.     746.    1411.     147.     215.     210.      48.      95.      43.   1472.60
      .35     3.46     6.71     3.06     .055     .055     .055     .000  1467.20  9825.65
  .006917     470.     502.     510.        2        8        0      .00   235.90 10061.55
0
#SECNO 1.483

3470 ENCROACHMENT STATIONS=    9791.0   10217.0  TYPE=     1  TARGET=   -9791.000
```

```
   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


 ELENCL=   1478.90  ELENCR= 100000.00
     1.48     7.26  1477.26  1475.67      .00  1477.50      .23     2.71      .03  1476.20
    1609.      59.    1075.     475.      56.     248.     165.     100.      46.   1474.30
      .39     1.05     4.34     2.87     .055     .055     .055     .000  1470.00  9846.96
  .003559     530.     528.     528.        2       15        0      .00   253.88 10100.84
0
 ‡SECNO 1.572

 3470 ENCROACHMENT STATIONS=    9698.0   10271.0  TYPE=     1  TARGET=   -9698.000
  ELENCL=   1480.90  ELENCR= 100000.00
     1.57     5.28  1478.98  1477.85      .00  1479.11      .13     1.60      .01  1477.40
    1609.     668.     492.     449.     243.     133.     206.     106.      49.   1476.50
      .44     2.75     3.71     2.18     .055     .055     .055     .000  1473.70  9864.78
  .003339     410.     470.     500.        3       14        0      .00   300.62 10165.40
0
 ‡SECNO 1.638

 3470 ENCROACHMENT STATIONS=    9583.0   10203.0  TYPE=     1  TARGET=   -9583.000
  ELENCL=   1483.00  ELENCR= 100000.00
     1.64     4.89  1480.59  1480.22      .00  1480.99      .39     1.80      .08  1479.50
    1609.     454.    1041.     114.     145.     177.      57.     110.      51.   1479.80
      .46     3.14     5.87     1.99     .055     .055     .055     .000  1475.70  9846.17
  .008925     360.     350.     330.        2        9        0      .00   260.84 10107.02
0
 ‡SECNO 1.695

 3470 ENCROACHMENT STATIONS=    9830.0   10362.0  TYPE=     1  TARGET=   -9830.000
  ELENCL=   1485.20  ELENCR= 100000.00
     1.70     5.34  1482.64  1481.93      .00  1482.83      .19     1.82      .02  1481.50
    1609.     391.     700.     518.     143.     156.     222.     113.      53.   1481.30
      .48     2.73     4.49     2.34     .055     .055     .055     .000  1477.30  9895.54
  .004413     297.     300.     303.        2       10        0      .00   287.20 10182.74
0
 ‡SECNO 1.761

 3265 DIVIDED FLOW


 3470 ENCROACHMENT STATIONS=    9482.0   10614.0  TYPE=     1  TARGET=   -9482.000
```

```
   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


 ELENCL=   1489.80  ELENCR= 100000.00
     1.76     5.41  1484.51  1484.37      .00  1484.97      .45     2.06      .08  1483.20
    1609.     131.    1061.     417.      46.     165.     192.     117.      56.   1483.20
      .50     2.86     6.45     2.17     .055     .055     .055     .000  1479.10  9941.24
  .008296     360.     350.     340.        2        5        0      .00   404.57 10364.56
0
 #SECNO 1.856

 3470 ENCROACHMENT STATIONS=    9707.0   10473.0  TYPE=     1  TARGET=   -9707.000
  ELENCL=   1492.50  ELENCR= 100000.00
     1.86     6.79  1487.49  1485.96      .00  1487.86      .37     2.88      .01  1484.50
    1609.     208.    1201.     201.      84.     221.      77.     121.      59.   1485.20
      .53     2.46     5.42     2.62     .055     .055     .055     .000  1480.70  9914.57
  .004202     502.     502.     502.        2        8        0      .00   150.35 10064.92
0
 #SECNO 1.951

 3470 ENCROACHMENT STATIONS=    9417.0   10544.0  TYPE=     1  TARGET=   -9417.000
  ELENCL=   1497.00  ELENCR= 100000.00
     1.95     6.63  1489.53  1487.86      .00  1489.81      .28     1.94      .01  1486.70
    1609.     674.     866.      69.     206.     173.      29.     126.      61.   1486.10
      .57     3.27     5.00     2.35     .055     .055     .055     .000  1482.90  9903.18
  .003554     510.     502.     495.        3       19        0      .00   129.20 10032.38
0
 #SECNO 2.045
     2.05     5.27  1491.87  1491.32      .00  1492.11      .24     2.30      .00  1490.90
    1609.     591.     651.     367.     198.     127.     133.     131.      63.   1491.20
      .60     2.99     5.12     2.76     .055     .055     .055     .000  1486.60  9860.99
  .006023     505.     505.     510.        2       14        0      .00   281.64 10142.63
0
 #SECNO 2.121

 3470 ENCROACHMENT STATIONS=        .0   10133.0  TYPE=     1  TARGET=   10133.000
     2.12     5.73  1494.43  1493.71      .00  1494.85      .42     2.68      .05  1492.10
    1308.     255.     939.     114.      74.     161.      50.     134.      65.   1493.60
      .62     3.44     5.83     2.27     .055     .055     .055     .000  1488.70  9936.16
  .007299     405.     410.     415.        2       11        0      .00   136.41 10072.57
0
```

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 2.200

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= .0 10036.0 TYPE= 1 TARGET= 10036.000

2.20	5.50	1496.00	1494.33	.00	1496.06	.06	1.18	.04	1496.10
1308.	728.	580.	0.	431.	244.	0.	139.	67.	1498.50
.68	1.69	2.38	.00	.055	.055	.055	.000	1490.50	9689.15
.001521	400.	417.	425.	3	23	0	.00	336.41	10030.07

0

THIS RUN EXECUTED 11/23/87 15:38:36

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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 1.1
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T1 FLOODPLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DISTRICT
T2 500 YEAR FLOOD EVENT - BASED ON 6-HR RAINFALL
T3 BUCHANAN WASH - SKUNK CREEK TO C.A.P. CANAL SEPTEMBER, 1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	5.	0.	0.	.000000	.00	.0	0.	1465.950	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	.000	-1.000	.000	.000	.000	-1.000	.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 4

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
#SECNO  .710
3280 CROSS SECTION       .71 EXTENDED      1.65 FEET

      .71    16.45  1465.95  1456.26  1465.95  1465.95      .00      .00      .00  1456.30
    3067.    1540.     165.    1362.    6848.     549.    5067.       0.       0.   1456.00
      .00      .22      .30      .27     .055     .055     .055     .000  1449.50  8805.00
  .000004       0.       0.       0.        0       15        0      .00  1729.54 10534.54
0
#SECNO  .782

3265 DIVIDED FLOW

3280 CROSS SECTION       .78 EXTENDED       .75 FEET

      .78    11.45  1465.95  1457.42      .00  1465.95      .00      .00      .00  1457.10
    3067.     903.     268.    1896.    2850.     682.    5272.      90.      13.   1459.80
      .29      .32      .39      .36     .055     .055     .055     .000  1454.50  9401.00
  .000010     380.     380.     360.        0       19        0      .00  1233.94 10639.79
0
#SECNO  .890
      .89    11.96  1465.96  1460.30      .00  1465.96      .00      .01      .00  1460.30
    3067.    2160.     253.     654.    5042.     419.    1421.     195.      30.   1458.90
      .65      .43      .60      .46     .055     .055     .055     .000  1454.00  9000.13
  .000025     740.     570.     400.        0       11        0      .00  1267.42 10267.56
0
#SECNO  .985

3265 DIVIDED FLOW

      .99     7.88  1465.98  1462.67      .00  1466.00      .02      .03      .00  1461.20
    3067.    2294.     412.     361.    2407.     276.     358.     261.      45.   1461.50
      .81      .95     1.49     1.01     .055     .055     .055     .000  1458.10  9169.29
  .000248     600.     502.     490.        1       15        0      .00   966.98 10140.38
0
```

```
   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 1.120

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9034.0   10194.0  TYPE=     1  TARGET=   -9034.000
 ELENCL=   1472.10  ELENCR= 100000.00
     1.12     4.75  1465.85  1465.85      .00  1466.86     1.01      .55      .30  1463.80
    3067.     759.    2056.     252.     134.     226.      54.     287.      54.   1465.10
      .83     5.64     9.09     4.63     .055     .055     .055     .000  1461.10  9875.76
  .021058     640.     713.     730.        0       14        0      .00   212.56 10088.33
0
#SECNO 1.207

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

     1.21     7.09  1470.09  1468.81      .00  1470.37      .28     3.44      .07  1466.50
    3067.    1612.    1179.     276.     515.     212.      75.     293.      57.   1466.00
      .86     3.13     5.56     3.70     .055     .055     .055     .000  1463.00  9530.62
  .003830     450.     459.     480.        6       11        0      .00   314.61 10055.29
0
#SECNO 1.288

3470 ENCROACHMENT STATIONS=    9785.0   10232.0  TYPE=     1  TARGET=   -9785.000
 ELENCL=   1471.60  ELENCR= 100000.00
     1.29     6.43  1471.93  1470.99      .00  1472.21      .28     1.84      .00  1469.10
    3067.    1584.    1063.     420.     476.     189.     124.     301.      60.   1470.20
      .89     3.33     5.62     3.39     .055     .055     .055     .000  1465.50  9620.66
  .005514     380.     428.     440.        4       15        0      .00   476.68 10097.35
0
#SECNO 1.383

3470 ENCROACHMENT STATIONS=    9720.0   10219.0  TYPE=     1  TARGET=   -9720.000
 ELENCL=   1475.10  ELENCR= 100000.00
     1.38     7.59  1474.79  1474.10      .00  1475.32      .53     3.03      .07  1471.90
    3067.    1184.    1650.     233.     316.     230.      65.     308.      65.   1472.60
      .91     3.75     7.18     3.58     .055     .055     .055     .000  1467.20  9780.58
  .007018     470.     502.     510.        2        8        0      .00   283.97 10064.55
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


 *SECNO 1.483

 3470 ENCROACHMENT STATIONS=    9791.0   10217.0  TYPE=     1  TARGET=   -9791.000
  ELENCL=   1478.90  ELENCR= 100000.00
      1.48     7.73  1477.73  1476.05      .00  1477.95      .22     2.61      .03  1476.20
     1958.     167.    1187.     604.     116.     273.     201.     316.      68.   1474.30
       .95     1.45     4.35     3.00     .055     .055     .055     .000  1470.00  9840.84
   .003142     530.     528.     528.        2       14        0      .00   262.82 10103.66
0
 *SECNO 1.572

 3470 ENCROACHMENT STATIONS=    9698.0   10271.0  TYPE=     1  TARGET=   -9698.000
  ELENCL=   1480.90  ELENCR= 100000.00
      1.57     5.59  1479.29  1478.09      .00  1479.43      .14     1.47      .01  1477.40
     1958.     814.     550.     593.     283.     144.     253.     322.      71.   1476.50
      1.00     2.88     3.83     2.34     .055     .055     .055     .000  1473.70  9855.58
   .003206     410.     470.     500.        3       11        0      .00   317.70 10173.28
0
 *SECNO 1.638

 3470 ENCROACHMENT STATIONS=    9583.0   10203.0  TYPE=     1  TARGET=   -9583.000
  ELENCL=   1483.00  ELENCR= 100000.00
      1.64     5.15  1480.85  1480.50      .00  1481.26      .41     1.74      .08  1479.50
     1958.     606.    1161.     191.     177.     190.      79.     327.      73.   1479.80
      1.02     3.42     6.10     2.40     .055     .055     .055     .000  1475.70  9839.09
   .008805     360.     350.     330.        2        9        0      .00   270.47 10109.56
0
 *SECNO 1.695

 3470 ENCROACHMENT STATIONS=    9830.0   10362.0  TYPE=     1  TARGET=   -9830.000
  ELENCL=   1485.20  ELENCR= 100000.00
      1.70     5.60  1482.90  1482.12      .00  1483.11      .21     1.83      .02  1481.50
     1958.     489.     782.     687.     165.     166.     266.     330.      75.   1481.30
      1.04     2.97     4.71     2.59     .055     .055     .055     .000  1477.30  9892.95
   .004482     297.     300.     303.        2       10        0      .00   295.85 10188.79
0
 *SECNO 1.761
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```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   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


3470 ENCROACHMENT STATIONS=    9482.0   10614.0  TYPE=     1  TARGET=   -9482.000
 ELENCL=   1489.80  ELENCR= 100000.00
     1.76     5.67  1484.77  1484.65      .00  1485.19      .42     2.02      .06  1483.20
    1958.     171.    1129.     658.     56.     174.     279.     335.      78.   1483.20
     1.06     3.05     6.48     2.36    .055     .055     .055     .000  1479.10  9938.57
  .007787     360.     350.     340.       1        6        0      .00   425.96 10366.43
0
 #SECNO 1.856

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    9707.0   10473.0  TYPE=     1  TARGET=   -9707.000
 ELENCL=   1492.50  ELENCR= 100000.00
     1.86     7.08  1487.78  1486.40      .00  1488.21      .43     3.02      .00  1484.50
    1958.     291.    1391.     276.    105.     233.      92.     340.      82.   1485.20
     1.09     2.79     5.98     2.99    .055     .055     .055     .000  1480.70  9904.95
  .004781     502.     502.     502.       2        5        0      .00   182.54 10225.90
0
 #SECNO 1.951

3470 ENCROACHMENT STATIONS=    9417.0   10544.0  TYPE=     1  TARGET=   -9417.000
 ELENCL=   1497.00  ELENCR= 100000.00
     1.95     7.09  1489.99  1488.31      .00  1490.30      .31     2.07      .01  1486.70
    1958.     868.     987.     104.    243.     187.      41.     345.      83.   1486.10
     1.12     3.57     5.28     2.52    .055     .055     .055     .000  1482.90  9899.51
  .003578     510.     502.     495.       3       14        0      .00   141.77 10041.28
0
 #SECNO 2.045
     2.05     5.64  1492.24  1491.49      .00  1492.46      .23     2.16      .01  1490.90
    1958.     759.     695.     504.    244.     138.     185.     352.      86.   1491.20
     1.16     3.11     5.02     2.73    .055     .055     .055     .000  1486.60  9858.22
  .005184     505.     505.     510.       2       18        0      .00   324.15 10182.37
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


#SECNO 2.121

3470 ENCROACHMENT STATIONS=        .0   10133.0  TYPE=     1  TARGET=   10133.000
     2.12     5.83  1494.53  1493.82      .00  1494.97      .44     2.44      .06  1492.10
    1407.     283.     989.     136.      79.     166.      56.     356.      88.   1493.60
     1.18     3.58     5.97     2.41     .055     .055     .055     .000  1488.70  9935.42
  .007400     405.     410.     415.        2       15        0      .00   139.06 10074.48
0
#SECNO 2.200

3470 ENCROACHMENT STATIONS=        .0   10036.0  TYPE=     1  TARGET=   10036.000
     2.20     5.62  1496.12  1494.47      .00  1496.19      .06     1.18      .04  1496.10
    1407.     802.     605.       0.     464.     252.       0.     360.      91.   1498.50
     1.24     1.73     2.40      .00     .055     .055     .055     .000  1490.50  9684.37
  .001510     400.     417.     425.        3       18        0      .00   345.99 10030.36
0
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THIS RUN EXECUTED 11/23/87 15:41:04

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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 1.1
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

BUCHANAN WASH - SKUNK CR

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	EG	VCH	TOPWID	SSTA	ENDST
	.710	1422.00	1456.50	7.00	1456.56	2.80	765.69	9680.00	10486.76
	.710	2005.00	1458.93	9.43	1458.94	.90	1017.52	9478.50	10496.02
	.710	2304.00	1460.42	10.92	1460.42	.64	1064.97	9436.73	10501.70
	.710	3067.00	1465.95	16.45	1465.95	.30	1729.54	8805.00	10534.54
	.782	1422.00	1457.49	2.99	1457.57	3.11	752.60	9780.79	10588.15
	.782	2005.00	1458.99	4.49	1459.01	1.34	846.75	9732.76	10612.37
	.782	2304.00	1460.44	5.94	1460.45	.85	902.21	9693.49	10617.80
	.782	3067.00	1465.95	11.45	1465.95	.39	1233.94	9401.00	10639.79
	.890	1422.00	1459.99	5.99	1460.21	4.70	523.89	9483.36	10121.88
*	.890	2005.00	1459.85	5.85	1460.42	7.38	465.35	9644.11	10117.79
	.890	2304.00	1460.51	6.51	1460.71	4.85	758.28	9403.45	10215.09
	.890	3067.00	1465.96	11.96	1465.96	.60	1267.42	9000.13	10267.56
	.985	1422.00	1462.65	4.55	1462.83	4.06	225.69	9855.94	10081.63
	.985	2005.00	1463.36	5.27	1463.49	3.79	668.63	9392.68	10091.47
	.985	2304.00	1463.22	5.12	1463.43	4.78	583.56	9475.46	10089.42
	.985	3067.00	1465.98	7.88	1466.00	1.49	966.98	9169.29	10140.38
	1.120	1422.00	1465.81	4.71	1466.04	4.29	209.70	9877.94	10087.65
	1.120	2005.00	1466.13	5.03	1466.45	5.20	235.84	9858.00	10093.84
	1.120	2304.00	1466.57	5.47	1466.85	4.92	279.35	9822.88	10102.23
*	1.120	3067.00	1465.85	4.75	1466.86	9.09	212.56	9875.76	10088.33
	1.207	1422.00	1468.29	5.29	1468.69	5.99	216.10	9830.01	10049.94
	1.207	2005.00	1468.90	5.90	1469.27	6.08	228.13	9823.61	10051.75
	1.207	2304.00	1469.05	6.05	1469.46	6.49	235.41	9683.53	10052.20
	1.207	3067.00	1470.09	7.09	1470.37	5.56	314.61	9530.62	10055.29
	1.288	1422.00	1470.88	5.38	1471.09	4.53	261.50	9809.30	10083.74
	1.288	2005.00	1471.33	5.83	1471.57	5.02	295.47	9794.22	10089.69
	1.288	2304.00	1471.57	6.07	1471.82	5.10	306.88	9785.99	10092.87
	1.288	3067.00	1471.93	6.43	1472.21	5.62	476.68	9620.66	10097.35

SECNO	Q	CWSEL	DEPTH	EG	VCH	TOPWID	SSTA	ENDST
1.383	1422.00	1473.47	6.27	1473.89	5.80	154.60	9902.37	10056.96
1.383	2005.00	1474.05	6.85	1474.52	6.40	217.52	9842.78	10060.31
1.383	2304.00	1474.27	7.07	1474.77	6.71	235.90	9825.65	10061.55
1.383	3067.00	1474.79	7.59	1475.32	7.18	283.97	9780.58	10064.55
1.483	1175.00	1476.50	6.50	1476.75	4.31	140.13	9856.94	10096.24
1.483	1467.00	1477.03	7.03	1477.27	4.36	226.73	9850.00	10099.44
1.483	1609.00	1477.26	7.26	1477.50	4.34	253.88	9846.96	10100.84
1.483	1958.00	1477.73	7.73	1477.95	4.35	262.82	9840.84	10103.66
1.572	1175.00	1478.51	4.81	1478.64	3.56	278.45	9875.31	10153.76
1.572	1467.00	1478.84	5.14	1478.97	3.66	293.48	9868.39	10161.87
1.572	1609.00	1478.98	5.28	1479.11	3.71	300.62	9864.78	10165.40
1.572	1958.00	1479.29	5.59	1479.43	3.83	317.70	9855.58	10173.28
1.638	1175.00	1480.24	4.54	1480.60	5.41	236.30	9861.54	10103.40
1.638	1467.00	1480.49	4.79	1480.87	5.74	256.54	9849.38	10105.92
1.638	1609.00	1480.59	4.89	1480.99	5.87	260.84	9846.17	10107.02
1.638	1958.00	1480.85	5.15	1481.26	6.10	270.47	9839.09	10109.56
1.695	1175.00	1482.25	4.95	1482.43	4.20	271.33	9899.43	10170.76
1.695	1467.00	1482.53	5.22	1482.71	4.39	283.33	9896.70	10180.03
1.695	1609.00	1482.64	5.34	1482.83	4.49	287.20	9895.54	10182.74
1.695	1958.00	1482.90	5.60	1483.11	4.71	295.85	9892.95	10188.79
1.761	1175.00	1484.13	5.03	1484.61	6.18	278.91	9945.23	10361.76
1.761	1467.00	1484.40	5.30	1484.87	6.41	305.66	9942.50	10363.67
1.761	1609.00	1484.51	5.41	1484.97	6.45	404.57	9941.24	10364.56
1.761	1958.00	1484.77	5.67	1485.19	6.48	425.96	9938.57	10366.43
1.856	1175.00	1486.99	6.29	1487.28	4.70	128.12	9931.19	10059.31
1.856	1467.00	1487.36	6.66	1487.69	5.17	144.34	9919.07	10063.40
1.856	1609.00	1487.49	6.79	1487.86	5.42	150.35	9914.57	10064.92
1.856	1958.00	1487.78	7.08	1488.21	5.98	182.54	9904.95	10225.90
1.951	1175.00	1488.84	5.94	1489.09	4.63	115.59	9908.67	10024.26
1.951	1467.00	1489.32	6.42	1489.59	4.89	123.46	9904.85	10028.31
1.951	1609.00	1489.53	6.63	1489.81	5.00	129.20	9903.18	10032.38
1.951	1958.00	1489.99	7.09	1490.30	5.28	141.77	9899.51	10041.28
2.045	1175.00	1491.37	4.77	1491.65	5.26	246.61	9864.89	10111.50
2.045	1467.00	1491.72	5.12	1491.97	5.18	259.97	9862.24	10122.21
2.045	1609.00	1491.87	5.27	1492.11	5.12	281.64	9860.99	10142.63
2.045	1958.00	1492.24	5.64	1492.46	5.02	324.15	9858.22	10182.37
2.121	1065.00	1494.19	5.49	1494.55	5.28	130.77	9937.73	10068.50
2.121	1253.00	1494.38	5.68	1494.78	5.70	135.31	9936.46	10071.77
2.121	1308.00	1494.43	5.73	1494.85	5.83	136.41	9936.16	10072.57
2.121	1407.00	1494.53	5.83	1494.97	5.97	139.06	9935.42	10074.48

SECNO	Q	CWSEL	DEPTH	EG	VCH	TOPWID	SSTA	ENDST
2.200	1065.00	1495.66	5.16	1495.72	2.34	307.79	9701.73	10029.28
2.200	1253.00	1495.92	5.42	1495.99	2.37	330.06	9691.98	10029.90
2.200	1308.00	1496.00	5.50	1496.06	2.38	336.41	9689.15	10030.07
2.200	1407.00	1496.12	5.62	1496.19	2.40	345.99	9684.37	10030.36

BUCHANAN WASH - SKUNK CR

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	.710	.00	.00	.00	1449.50	1422.00	1456.50	1455.80	1456.56	18.14	2.80	913.33	333.84
	.710	.00	.00	.00	1449.50	2005.00	1458.93	1456.00	1458.94	1.04	.90	3207.32	1970.19
	.710	.00	.00	.00	1449.50	2304.00	1460.42	1456.08	1460.42	.40	.64	4758.57	3640.20
	.710	.00	.00	.00	1449.50	3067.00	1465.95	1456.26	1465.95	.04	.30	12464.31	14605.90
	.782	380.00	.00	.00	1454.50	1422.00	1457.49	1457.06	1457.57	45.12	3.11	704.96	211.70
	.782	380.00	.00	.00	1454.50	2005.00	1458.99	1457.19	1459.01	4.65	1.34	1911.93	930.05
	.782	380.00	.00	.00	1454.50	2304.00	1460.44	1457.27	1460.45	1.25	.85	3174.93	2060.39
	.782	380.00	.00	.00	1454.50	3067.00	1465.95	1457.42	1465.95	.10	.39	8804.02	9924.60
	.890	570.00	.00	.00	1454.00	1422.00	1459.99	1459.33	1460.21	53.08	4.70	475.04	195.19
*	.890	570.00	.00	.00	1454.00	2005.00	1459.85	1459.85	1460.42	135.60	7.38	410.30	172.18
	.890	570.00	.00	.00	1454.00	2304.00	1460.51	1460.07	1460.71	48.75	4.85	823.66	330.00
	.890	570.00	.00	.00	1454.00	3067.00	1465.96	1460.30	1465.96	.25	.60	6881.62	6077.50
	.985	502.00	.00	.00	1458.10	1422.00	1462.65	1461.63	1462.83	45.46	4.06	441.48	210.91
	.985	502.00	.00	.00	1458.10	2005.00	1463.36	1462.03	1463.49	30.77	3.79	773.98	361.45
	.985	502.00	.00	.00	1458.10	2304.00	1463.22	1462.20	1463.43	51.32	4.78	683.02	321.63
	.985	502.00	.00	.00	1458.10	3067.00	1465.98	1462.67	1466.00	2.48	1.49	3040.95	1948.25
	1.120	713.00	.00	.00	1461.10	1422.00	1465.81	1464.71	1466.04	47.46	4.29	407.53	206.42
	1.120	713.00	.00	.00	1461.10	2005.00	1466.13	1465.19	1466.45	62.14	5.20	479.84	254.34
	1.120	713.00	.00	.00	1461.10	2304.00	1466.57	1465.40	1466.85	48.23	4.92	593.13	331.76
*	1.120	713.00	.00	.00	1461.10	3067.00	1465.85	1465.85	1466.86	210.58	9.09	415.03	211.35
	1.207	459.00	.00	.00	1463.00	1422.00	1468.29	1467.86	1468.69	68.96	5.99	350.94	171.24

1.207	459.00	.00	.00	1463.00	2005.00	1468.90	1468.29	1469.27	60.27	6.08	487.00	258.26
1.207	459.00	.00	.00	1463.00	2304.00	1469.05	1468.48	1469.46	66.18	6.49	521.91	283.22
1.207	459.00	.00	.00	1463.00	3067.00	1470.09	1468.81	1470.37	38.30	5.56	801.28	495.58
1.288	428.00	.00	.00	1465.50	1422.00	1470.88	1469.95	1471.09	49.20	4.53	422.64	202.72
1.288	428.00	.00	.00	1465.50	2005.00	1471.33	1470.42	1471.57	52.35	5.02	548.79	277.11
1.288	428.00	.00	.00	1465.50	2304.00	1471.57	1470.58	1471.82	50.26	5.10	622.21	325.01
1.288	428.00	.00	.00	1465.50	3067.00	1471.93	1470.99	1472.21	55.14	5.62	789.05	413.02
1.383	502.00	.00	.00	1467.20	1422.00	1473.47	1472.67	1473.89	63.48	5.80	318.61	178.47
1.383	502.00	.00	.00	1467.20	2005.00	1474.05	1473.22	1474.52	66.26	6.40	425.05	246.31
1.383	502.00	.00	.00	1467.20	2304.00	1474.27	1473.50	1474.77	69.17	6.71	473.62	277.02
1.383	502.00	.00	.00	1467.20	3067.00	1474.79	1474.10	1475.32	70.18	7.18	610.64	366.11
1.483	528.00	.00	.00	1470.00	1175.00	1476.50	1475.11	1476.75	44.75	4.31	318.30	175.65
1.483	528.00	.00	.00	1470.00	1467.00	1477.03	1475.51	1477.27	38.47	4.36	411.96	236.51
1.483	528.00	.00	.00	1470.00	1609.00	1477.26	1475.67	1477.50	35.59	4.34	469.44	269.72
1.483	528.00	.00	.00	1470.00	1958.00	1477.73	1476.05	1477.95	31.42	4.35	589.88	349.30

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
1.572	470.00	.00	.00	1473.70	1175.00	1478.51	1477.52	1478.64	36.61	3.56	447.01	194.20
1.572	470.00	.00	.00	1473.70	1467.00	1478.84	1477.74	1478.97	34.16	3.66	539.80	250.99
1.572	470.00	.00	.00	1473.70	1609.00	1478.98	1477.85	1479.11	33.39	3.71	581.73	278.45
1.572	470.00	.00	.00	1473.70	1958.00	1479.29	1478.09	1479.43	32.06	3.83	679.21	345.78
1.638	350.00	.00	.00	1475.70	1175.00	1480.24	1479.79	1480.60	87.50	5.41	288.28	125.61
1.638	350.00	.00	.00	1475.70	1467.00	1480.49	1480.12	1480.87	89.14	5.74	350.84	155.38
1.638	350.00	.00	.00	1475.70	1609.00	1480.59	1480.22	1480.99	89.25	5.87	379.14	170.31
1.638	350.00	.00	.00	1475.70	1958.00	1480.85	1480.50	1481.26	88.05	6.10	446.66	208.66
1.695	300.00	.00	.00	1477.30	1175.00	1482.25	1481.66	1482.43	44.13	4.20	411.79	176.87
1.695	300.00	.00	.00	1477.30	1467.00	1482.53	1481.85	1482.71	43.91	4.39	487.54	221.38
1.695	300.00	.00	.00	1477.30	1609.00	1482.64	1481.93	1482.83	44.13	4.49	520.69	242.22
1.695	300.00	.00	.00	1477.30	1958.00	1482.90	1482.12	1483.11	44.82	4.71	596.31	292.45
1.761	350.00	.00	.00	1479.10	1175.00	1484.13	1483.98	1484.61	85.91	6.18	280.15	126.77
1.761	350.00	.00	.00	1479.10	1467.00	1484.40	1484.24	1484.87	85.23	6.41	356.96	158.90
1.761	350.00	.00	.00	1479.10	1609.00	1484.51	1484.37	1484.97	82.96	6.45	402.56	176.65
1.761	350.00	.00	.00	1479.10	1958.00	1484.77	1484.65	1485.19	77.87	6.48	509.21	221.89
1.856	502.00	.00	.00	1480.70	1175.00	1486.99	1484.82	1487.28	35.65	4.70	313.02	196.80
1.856	502.00	.00	.00	1480.70	1467.00	1487.36	1485.73	1487.69	39.50	5.17	362.58	233.41
1.856	502.00	.00	.00	1480.70	1609.00	1487.49	1485.96	1487.86	42.02	5.42	382.45	248.22
1.856	502.00	.00	.00	1480.70	1958.00	1487.78	1486.40	1488.21	47.81	5.98	429.53	283.18
1.951	502.00	.00	.00	1482.90	1175.00	1488.84	1487.43	1489.09	36.00	4.63	325.50	195.83
1.951	502.00	.00	.00	1482.90	1467.00	1489.32	1487.75	1489.59	35.63	4.89	382.24	245.75
1.951	502.00	.00	.00	1482.90	1609.00	1489.53	1487.86	1489.81	35.54	5.00	408.67	269.89

1.951	502.00	.00	.00	1482.90	1958.00	1489.99	1488.31	1490.30	35.78	5.28	470.72	327.34
2.045	505.00	.00	.00	1486.60	1175.00	1491.37	1490.98	1491.65	75.77	5.26	327.04	134.98
2.045	505.00	.00	.00	1486.60	1467.00	1491.72	1491.14	1491.97	64.95	5.18	413.95	182.03
2.045	505.00	.00	.00	1486.60	1609.00	1491.87	1491.32	1492.11	60.23	5.12	457.61	207.33
2.045	505.00	.00	.00	1486.60	1958.00	1492.24	1491.49	1492.46	51.84	5.02	566.74	271.96
2.121	410.00	.00	.00	1488.70	1065.00	1494.19	1493.34	1494.55	64.82	5.28	253.86	132.28
2.121	410.00	.00	.00	1488.70	1253.00	1494.38	1493.67	1494.78	70.83	5.70	279.13	148.88
2.121	410.00	.00	.00	1488.70	1308.00	1494.43	1493.71	1494.85	72.99	5.83	285.40	153.10
2.121	410.00	.00	.00	1488.70	1407.00	1494.53	1493.82	1494.97	74.00	5.97	300.68	163.56
2.200	417.00	.00	.00	1490.50	1065.00	1495.66	1494.10	1495.72	15.48	2.34	568.85	270.71
2.200	417.00	.00	.00	1490.50	1253.00	1495.92	1494.31	1495.99	15.30	2.37	650.96	320.30
2.200	417.00	.00	.00	1490.50	1308.00	1496.00	1494.33	1496.06	15.21	2.38	675.08	335.33
2.200	417.00	.00	.00	1490.50	1407.00	1496.12	1494.47	1496.19	15.10	2.40	716.74	362.11

BUCHANAN WASH - SKUNK CR

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	.710	1422.00	1456.50	.00	.00	.00	765.69	.00
	.710	2005.00	1458.93	2.43	.00	.00	1017.52	.00
	.710	2304.00	1460.42	1.49	.00	.00	1064.97	.00
	.710	3067.00	1465.95	5.53	.00	.00	1729.54	.00
	.782	1422.00	1457.49	.00	.99	.00	752.60	380.00
	.782	2005.00	1458.99	1.50	.06	.00	846.75	380.00
	.782	2304.00	1460.44	1.45	.02	.00	902.21	380.00
	.782	3067.00	1465.95	5.51	.00	.00	1233.94	380.00
	.890	1422.00	1459.99	.00	2.50	.00	523.89	570.00
*	.890	2005.00	1459.85	-.13	.86	.00	465.35	570.00
	.890	2304.00	1460.51	.66	.07	.00	758.28	570.00
	.890	3067.00	1465.96	5.45	.01	.00	1267.42	570.00
	.985	1422.00	1462.65	.00	2.66	.00	225.69	502.00
	.985	2005.00	1463.36	.71	3.51	.00	668.63	502.00
	.985	2304.00	1463.22	-.14	2.71	.00	583.56	502.00
	.985	3067.00	1465.98	2.76	.02	.00	966.98	502.00
	1.120	1422.00	1465.81	.00	3.16	.00	209.70	713.00
	1.120	2005.00	1466.13	.32	2.76	.00	235.84	713.00
	1.120	2304.00	1466.57	.44	3.35	.00	279.35	713.00
*	1.120	3067.00	1465.85	-.73	-.14	.00	212.56	713.00
	1.207	1422.00	1468.29	.00	2.48	.00	216.10	459.00
	1.207	2005.00	1468.90	.61	2.77	.00	228.13	459.00
	1.207	2304.00	1469.05	.15	2.47	.00	235.41	459.00
	1.207	3067.00	1470.09	1.04	4.24	.00	314.61	459.00
	1.288	1422.00	1470.88	.00	2.59	.00	261.50	428.00
	1.288	2005.00	1471.33	.45	2.43	.00	295.47	428.00
	1.288	2304.00	1471.57	.24	2.52	.00	306.88	428.00
	1.288	3067.00	1471.93	.36	1.84	.00	476.68	428.00
	1.383	1422.00	1473.47	.00	2.60	.00	154.60	502.00
	1.383	2005.00	1474.05	.58	2.73	.00	217.52	502.00
	1.383	2304.00	1474.27	.21	2.70	.00	235.90	502.00
	1.383	3067.00	1474.79	.52	2.85	.00	283.97	502.00
	1.483	1175.00	1476.50	.00	3.03	.00	140.13	528.00
	1.483	1467.00	1477.03	.53	2.98	.00	226.73	528.00
	1.483	1609.00	1477.26	.23	3.00	.00	253.88	528.00
	1.483	1958.00	1477.73	.47	2.94	.00	262.82	528.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
1.572	1175.00	1478.51	.00	2.01	.00	278.45	470.00
1.572	1467.00	1478.84	.33	1.81	.00	293.48	470.00
1.572	1609.00	1478.98	.14	1.71	.00	300.62	470.00
1.572	1958.00	1479.29	.32	1.56	.00	317.70	470.00
1.638	1175.00	1480.24	.00	1.73	.00	236.30	350.00
1.638	1467.00	1480.49	.25	1.65	.00	256.54	350.00
1.638	1609.00	1480.59	.11	1.62	.00	260.84	350.00
1.638	1958.00	1480.85	.26	1.56	.00	270.47	350.00
1.695	1175.00	1482.25	.00	2.01	.00	271.33	300.00
1.695	1467.00	1482.53	.27	2.04	.00	283.33	300.00
1.695	1609.00	1482.64	.12	2.05	.00	287.20	300.00
1.695	1958.00	1482.90	.26	2.05	.00	295.85	300.00
1.761	1175.00	1484.13	.00	1.88	.00	278.91	350.00
1.761	1467.00	1484.40	.27	1.88	.00	305.66	350.00
1.761	1609.00	1484.51	.11	1.87	.00	404.57	350.00
1.761	1958.00	1484.77	.26	1.87	.00	425.96	350.00
1.856	1175.00	1486.99	.00	2.86	.00	128.12	502.00
1.856	1467.00	1487.36	.37	2.95	.00	144.34	502.00
1.856	1609.00	1487.49	.14	2.98	.00	150.35	502.00
1.856	1958.00	1487.78	.29	3.01	.00	182.54	502.00
1.951	1175.00	1488.84	.00	1.85	.00	115.59	502.00
1.951	1467.00	1489.32	.48	1.96	.00	123.46	502.00
1.951	1609.00	1489.53	.21	2.03	.00	129.20	502.00
1.951	1958.00	1489.99	.46	2.20	.00	141.77	502.00
2.045	1175.00	1491.37	.00	2.53	.00	246.61	505.00
2.045	1467.00	1491.72	.34	2.40	.00	259.97	505.00
2.045	1609.00	1491.87	.15	2.34	.00	281.64	505.00
2.045	1958.00	1492.24	.37	2.25	.00	324.15	505.00
2.121	1065.00	1494.19	.00	2.82	.00	130.77	410.00
2.121	1253.00	1494.38	.19	2.66	.00	135.31	410.00
2.121	1308.00	1494.43	.05	2.56	.00	136.41	410.00
2.121	1407.00	1494.53	.11	2.30	.00	139.06	410.00
2.200	1065.00	1495.66	.00	1.47	.00	307.79	417.00
2.200	1253.00	1495.92	.26	1.55	.00	330.06	417.00
2.200	1308.00	1496.00	.07	1.57	.00	336.41	417.00
2.200	1407.00	1496.12	.12	1.59	.00	345.99	417.00

HEC-2 RESULTS

TRIBUTARY

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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 1.1
**************************************************

T1      FLOOD PLAIN ANALYSIS  -  MARICOPA COUNTY FLOOD CONTROL DIST.
T2      10  YEAR STORM EVENT  -  6 HOUR
T3      BUCHANAN WASH           BRANCH CHANNEL NEAR  CANAL   MAY, 1987

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      0.        2.        0.        0.   .000000      .00       .0        0.  1491.370      .000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

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

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38.000    43.000     1.000     8.000     3.000    26.000     4.000    53.000    54.000   150.000


QT      4.000   100.000   231.000   301.000   467.000      .000      .000      .000      .000      .000
NC       .055      .055      .055      .100      .300      .000      .000      .000      .000      .000
X1      2.045    29.000 10019.000 10238.000      .000      .000      .000      .000      .000      .000
X3       .000      .000      .000 10019.000  1495.000      .000      .000      .000      .000      .000
GR   1497.800  9681.000  1497.400  9721.000  1496.900  9765.000  1496.300  9806.000  1494.600  9840.000
GR   1491.100  9867.000  1490.300  9911.000  1489.500  9949.000  1489.500  9963.000  1490.900  9978.000
GR   1490.900  9988.000  1486.600  9995.000  1486.700 10000.000  1486.600 10010.000  1491.200 10019.000
GR   1490.100 10048.000  1488.000 10057.000  1490.900 10066.000  1490.700 10094.000  1491.700 10120.000
GR   1492.000 10158.000  1492.400 10199.000  1493.200 10238.000  1493.900 10280.000  1493.600 10321.000
GR   1493.700 10360.000  1494.200 10384.000  1502.100 10422.000  1502.700 10425.000      .000      .000

X1      2.121    29.000 10133.000 10443.000   405.000   370.000   401.000      .000      .000      .000
X3       .000      .000      .000 10133.000  1497.100      .000      .000      .000      .000      .000
GR   1503.600  9596.000  1502.300  9639.000  1502.200  9681.000  1501.800  9722.000  1501.300  9768.000
GR   1500.500  9813.000  1499.700  9853.000  1498.400  9888.000  1496.700  9921.000  1492.800  9947.000
GR   1492.100  9980.000  1488.700  9990.000  1489.300 10000.000  1490.500 10010.000  1493.600 10019.000
GR   1493.000 10048.000  1494.800 10079.000  1496.400 10110.000  1497.100 10133.000  1496.500 10164.000
GR   1495.400 10204.000  1494.700 10243.000  1493.800 10281.000  1493.000 10322.000  1494.000 10365.000
GR   1495.300 10404.000  1497.400 10443.000  1500.700 10486.000  1502.000 10504.000      .000      .000

X1      2.200    33.000 10036.000 10328.000   270.000   480.000   417.000      .000      .000      .000
X3       .000      .000      .000 10036.000  1498.500      .000      .000      .000      .000      .000
GR   1502.000  9511.000  1500.400  9566.000  1498.800  9612.000  1496.900  9654.000  1495.700  9701.000
GR   1494.200  9741.000  1494.100  9781.000  1493.000  9811.000  1494.700  9824.000  1493.500  9837.000
GR   1493.400  9863.000  1493.100  9891.000  1495.600  9903.000  1495.300  9930.000  1496.100  9959.000
GR   1495.000  9970.000  1491.500  9981.000  1491.400 10000.000  1490.500 10017.000  1498.500 10036.000
GR   1498.100 10053.000  1495.700 10067.000  1496.100 10101.000  1496.300 10141.000  1496.300 10178.000
GR   1496.600 10215.000  1497.000 10253.000  1497.000 10291.000  1499.800 10328.000  1502.700 10364.000
GR   1505.100 10405.000  1509.400 10447.000  1509.300 10447.000      .000      .000      .000      .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=    .100 CEHV=    .300
#SECNO 2.045

3470 ENCROACHMENT STATIONS=   10019.0   10425.0  TYPE=     1  TARGET=  -10019.000
 ELENCL=   1495.00  ELENCR= 100000.00
     2.05     3.37  1491.37  1490.19  1491.37  1491.39      .02      .00      .00  1491.20
     100.       0.     100.       0.       0.      81.       0.       0.       0.   1493.20
      .00      .00     1.24      .00     .055     .055     .055     .000  1488.00 10019.00
  .002539       0.       0.       0.        0       13        0      .00    92.42 10111.42
0
#SECNO 2.121

3470 ENCROACHMENT STATIONS=   10133.0   10504.0  TYPE=     1  TARGET=  -10133.000
 ELENCL=   1497.10  ELENCR= 100000.00
     2.12      .85  1493.85  1493.77      .00  1493.98      .13     2.56      .03  1497.10
     100.       0.     100.       0.       0.      34.       0.       1.       1.   1497.40
      .04      .00     2.94      .00     .055     .055     .055     .000  1493.00 10278.92
  .036937     405.     401.     370.        4       17        0      .00    79.59 10358.52
0
#SECNO 2.200

3470 ENCROACHMENT STATIONS=   10036.0   10447.0  TYPE=     1  TARGET=  -10036.000
 ELENCL=   1498.50  ELENCR= 100000.00
     2.20     1.16  1496.86  1496.43      .00  1496.88      .01     2.88      .01  1498.50
     100.       0.     100.       0.       0.     102.       0.       1.       2.   1499.80
      .16      .00      .98      .00     .055     .055     .055     .000  1495.70 10060.24
  .002813     270.     417.     480.        7       10        0      .00   179.33 10239.57
0
```

THIS RUN EXECUTED 09/30/87 17:49:21

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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 1.1
**************************************************
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T1 FLOOD PLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DIST.
T2 50 YEAR STORM EVENT - 6 HOUR
T3 BUCHANAN WASH BRANCH CHANNEL NEAR CANAL MAY,1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	3.	0.	0.	.000000	.00	.0	0.	1491.720	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	.000	-1.000	.000	.000	.000	-1.000	.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 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
#SECNO 2.045

3470 ENCROACHMENT STATIONS=   10019.0   10425.0  TYPE=     1  TARGET=  -10019.000
 ELENCL=   1495.00  ELENCR= 100000.00
     2.05     3.72  1491.72  1491.02  1491.72  1491.78      .06      .00      .00  1491.20
     231.       0.     231.       0.       0.     115.       0.       0.       0.   1493.20
      .00      .00     2.01      .00     .055     .055     .055     .000  1488.00 10019.00
  .004912       0.       0.       0.        0       13        0      .00   103.54 10122.54
0
#SECNO 2.121

3470 ENCROACHMENT STATIONS=   10133.0   10504.0  TYPE=     1  TARGET=  -10133.000
 ELENCL=   1497.10  ELENCR= 100000.00
     2.12     1.48  1494.48  1494.08      .00  1494.57      .09     2.78      .01  1497.10
     231.       0.     231.       0.       0.      99.       0.       1.       1.   1497.40
      .05      .00     2.34      .00     .055     .055     .055     .000  1493.00 10252.62
  .010476     405.     401.     370.        3       14        0      .00   126.55 10379.16
0
#SECNO 2.200

3470 ENCROACHMENT STATIONS=   10036.0   10447.0  TYPE=     1  TARGET=  -10036.000
 ELENCL=   1498.50  ELENCR= 100000.00
     2.20     1.46  1497.16  1496.63      .00  1497.19      .03     2.62      .01  1498.50
     231.       0.     231.       0.       0.     166.       0.       2.       3.   1499.80
      .13      .00     1.39      .00     .055     .055     .055     .000  1495.70 10058.46
  .004191     270.     417.     480.        5       14        0      .00   234.69 10293.16
0
```

THIS RUN EXECUTED 09/30/87 17:49:38

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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 1.1
**************************************************
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T1      FLOOD PLAIN ANALYSIS  -  MARICOPA COUNTY FLOOD CONTROL DIST.
T2      100 YEAR STORM EVENT  -  6 HOUR
T3      BUCHANAN WASH            BRANCH CHANNEL NEAR CANAL   MAY,1987

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0.       4.       0.       0.   .000000      .00       .0       0.  1491.870     .000

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     3.000     .000   -1.000     .000     .000     .000   -1.000     .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 3

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
#SECNO 2.045

3470 ENCROACHMENT STATIONS=   10019.0   10425.0  TYPE=     1  TARGET=  -10019.000
 ELENCL=   1495.00  ELENCR= 100000.00
     2.05     3.87  1491.87  1491.16  1491.87  1491.95      .08      .00      .00  1491.20
     301.       0.     301.       0.       0.     132.       0.       0.       0.   1493.20
      .00      .00     2.28      .00     .055     .055     .055     .000  1488.00 10019.00
  .006590       0.       0.       0.        0       13        0      .00   122.54 10141.54
0
#SECNO 2.121

3470 ENCROACHMENT STATIONS=   10133.0   10504.0  TYPE=     1  TARGET=  -10133.000
 ELENCL=   1497.10  ELENCR= 100000.00
     2.12     1.73  1494.73  1494.19      .00  1494.81      .08     2.86      .00  1497.10
     301.       0.     301.       0.       0.     134.       0.       1.       1.   1497.40
      .05      .00     2.25      .00     .055     .055     .055     .000  1493.00 10241.19
  .007731     405.     401.     370.        4       17        0      .00   145.78 10386.97
0
#SECNO 2.200

3470 ENCROACHMENT STATIONS=   10036.0   10447.0  TYPE=     1  TARGET=  -10036.000
 ELENCL=   1498.50  ELENCR= 100000.00
     2.20     1.56  1497.26  1496.71      .00  1497.30      .04     2.49      .00  1498.50
     301.       0.     301.       0.       0.     188.       0.       3.       3.   1499.80
      .12      .00     1.60      .00     .055     .055     .055     .000  1495.70 10057.92
  .004750     270.     417.     480.        4       14        0      .00   236.47 10294.39
0
```

THIS RUN EXECUTED 09/30/87 17:49:55

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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 1.1
**************************************************
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T1 FLOOD PLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DIST.
T2 500 YEAR STORM EVENT - 6 HOUR
T3 BUCHANAN WASH BRANCH CHANNEL NEAR CANAL MAY,1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	5.	0.	0.	.000000	.00	.0	0.	1492.240	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	.000	-1.000	.000	.000	.000	-1.000	.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 4

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
$SECNO 2.045

3470 ENCROACHMENT STATIONS=   10019.0   10425.0  TYPE=     1  TARGET=  -10019.000
 ELENCL=   1495.00  ELENCR= 100000.00
     2.05     4.24  1492.24  1491.38  1492.24  1492.34      .10      .00      .00  1491.20
     467.       0.     467.       0.       0.     185.       0.       0.       0.   1493.20
      .00      .00     2.52      .00     .055     .055     .055     .000  1488.00 10019.00
  .007508       0.       0.       0.        0       12        0      .00   163.60 10182.60
0
$SECNO 2.121

3470 ENCROACHMENT STATIONS=   10133.0   10504.0  TYPE=     1  TARGET=  -10133.000
 ELENCL=   1497.10  ELENCR= 100000.00
     2.12     2.11  1495.11  1494.43      .00  1495.20      .09     2.86      .00  1497.10
     467.       0.     467.       0.       0.     197.       0.       2.       2.   1497.40
      .05      .00     2.37      .00     .055     .055     .055     .000  1493.00 10219.60
  .006781     405.     401.     370.        2       22        0      .00   179.00 10398.60
0
$SECNO 2.200

3470 ENCROACHMENT STATIONS=   10036.0   10447.0  TYPE=     1  TARGET=  -10036.000
 ELENCL=   1498.50  ELENCR= 100000.00
     2.20     1.81  1497.51  1496.89      .00  1497.56      .06     2.36      .00  1498.50
     467.       0.     467.       0.       0.     246.       0.       4.       4.   1499.80
      .11      .00     1.90      .00     .055     .055     .055     .000  1495.70 10056.50
  .004801     270.     417.     480.        4       11        0      .00   241.09 10297.60
0
```

THIS RUN EXECUTED 09/30/87 17:50:12

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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 1.1
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

BUCHANAN WASH

SUMMARY PRINTOUT

SECNO	Q	CWSEL	DEPTH	EG	VCH	TOPWID	SSTA	ENDST
2.045	100.00	1491.37	3.37	1491.39	1.24	92.42	10019.00	10111.42
2.045	231.00	1491.72	3.72	1491.78	2.01	103.54	10019.00	10122.54
2.045	301.00	1491.87	3.87	1491.95	2.28	122.54	10019.00	10141.54
2.045	467.00	1492.24	4.24	1492.34	2.52	163.60	10019.00	10182.60
2.121	100.00	1493.85	.85	1493.98	2.94	79.59	10278.92	10358.52
2.121	231.00	1494.48	1.48	1494.57	2.34	126.55	10252.62	10379.16
2.121	301.00	1494.73	1.73	1494.81	2.25	145.78	10241.19	10386.97
2.121	467.00	1495.11	2.11	1495.20	2.37	179.00	10219.60	10398.60
2.200	100.00	1496.86	1.16	1496.88	.98	179.33	10060.24	10239.57
2.200	231.00	1497.16	1.46	1497.19	1.39	234.69	10058.46	10293.16
2.200	301.00	1497.26	1.56	1497.30	1.60	236.47	10057.92	10294.39
2.200	467.00	1497.51	1.81	1497.56	1.90	241.09	10056.50	10297.60

BUCHANAN WASH

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
2.045	.00	.00	.00	1488.00	100.00	1491.37	1490.19	1491.39	25.39	1.24	80.84	19.85
2.045	.00	.00	.00	1488.00	231.00	1491.72	1491.02	1491.78	49.12	2.01	114.80	32.96
2.045	.00	.00	.00	1488.00	301.00	1491.87	1491.16	1491.95	65.90	2.28	131.75	37.08
2.045	.00	.00	.00	1488.00	467.00	1492.24	1491.38	1492.34	75.08	2.52	185.06	53.89
2.121	401.00	.00	.00	1493.00	100.00	1493.85	1493.77	1493.98	369.37	2.94	33.98	5.20
2.121	401.00	.00	.00	1493.00	231.00	1494.48	1494.08	1494.57	104.76	2.34	98.64	22.57
2.121	401.00	.00	.00	1493.00	301.00	1494.73	1494.19	1494.81	77.31	2.25	134.03	34.23
2.121	401.00	.00	.00	1493.00	467.00	1495.11	1494.43	1495.20	67.81	2.37	196.97	56.71
2.200	417.00	.00	.00	1495.70	100.00	1496.86	1496.43	1496.88	28.13	.98	101.82	18.86
2.200	417.00	.00	.00	1495.70	231.00	1497.16	1496.63	1497.19	41.91	1.39	166.26	35.68
2.200	417.00	.00	.00	1495.70	301.00	1497.26	1496.71	1497.30	47.50	1.60	188.26	43.67
2.200	417.00	.00	.00	1495.70	467.00	1497.51	1496.89	1497.56	48.01	1.90	246.15	67.40

BUCHANAN WASH

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
2.045	100.00	1491.37	.00	.00	.00	92.42	.00
2.045	231.00	1491.72	.35	.00	.00	103.54	.00
2.045	301.00	1491.87	.15	.00	.00	122.54	.00
2.045	467.00	1492.24	.37	.00	.00	163.60	.00
2.121	100.00	1493.85	.00	2.48	.00	79.59	401.00
2.121	231.00	1494.48	.63	2.76	.00	126.55	401.00
2.121	301.00	1494.73	.25	2.86	.00	145.78	401.00
2.121	467.00	1495.11	.38	2.87	.00	179.00	401.00
2.200	100.00	1496.86	.00	3.01	.00	179.33	417.00
2.200	231.00	1497.16	.30	2.68	.00	234.69	417.00
2.200	301.00	1497.26	.10	2.53	.00	236.47	417.00
2.200	467.00	1497.51	.25	2.40	.00	241.09	417.00

SUMMARY OF ERRORS AND SPECIAL NOTES

1

THIS RUN EXECUTED 09/30/87 17:50:20

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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 1.1
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^Z

FLOODWAY PRINTOUT

1

11/25/87 15:04:21

THIS RUN EXECUTED 11/25/87 15:04:21

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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 1.1
**************************************************
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T1 FLOOD PLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DIST.
T2 FLD'WAY ENCROACH CALC. (NATURAL CONDITON) - 100 YR/6 HR STORM
T3 BUCHANAN WASH SKUNK CREEK TO C.A.P. CANAL OCT, 1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	.000000	.00	.0	0.	1460.420	.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

110.000	200.000	.000	.000	.000	.000	.000	.000	.000	.000

QT	4.000	2304.000	2304.000	2304.000	2304.000	.000	.000	.000	.000	.000
ET	.000	.000	10.400	6.100	10.400	9693.000	10351.000	.000	.000	.000
NC	.055	.055	.055	.100	.300	.000	.000	.000	.000	.000
X1	.710	57.000	9985.000	10025.000	.000	.000	.000	.000	.000	.000
GR	1464.300	8805.000	1465.200	8829.000	1465.900	8860.000	1465.600	8890.000	1465.500	8945.000
GR	1464.600	9006.000	1464.200	9072.000	1463.000	9130.000	1462.300	9188.000	1461.100	9257.000
GR	1461.000	9317.000	1461.300	9374.000	1460.800	9426.000	1459.100	9474.000	1457.400	9519.000
GR	1456.700	9574.000	1457.100	9621.000	1457.300	9668.000	1456.300	9683.000	1455.600	9700.000
GR	1455.500	9710.000	1455.200	9716.000	1456.200	9730.000	1456.600	9748.000	1455.600	9758.000
GR	1457.000	9776.000	1456.900	9798.000	1455.500	9823.000	1456.000	9852.000	1455.400	9887.000
GR	1455.500	9917.000	1455.100	9932.000	1454.300	9952.000	1455.200	9975.000	1456.300	9985.000
GR	1454.900	9990.000	1449.500	10000.000	1449.900	10016.000	1455.000	10018.000	1456.000	10025.000
GR	1456.100	10035.000	1455.400	10061.000	1454.900	10105.000	1455.200	10165.000	1455.200	10224.000
GR	1455.000	10267.000	1455.400	10316.000	1455.400	10363.000	1455.900	10405.000	1455.900	10458.000
GR	1456.300	10486.000	1460.500	10502.000	1464.400	10525.000	1468.300	10549.000	1469.900	10572.000
GR	1474.200	10608.000	1476.600	10648.000	.000	.000	.000	.000	.000	.000
X1	.782	48.000	9966.000	10032.000	380.000	360.000	380.000	.000	.000	.000
ET	.000	.000	.000	6.100	.000	9889.000	10446.000	.000	.000	.000
GR	1465.200	9401.000	1466.000	9455.000	1464.800	9494.000	1464.300	9529.000	1464.300	9559.000
GR	1464.100	9606.000	1462.800	9651.000	1460.600	9689.000	1458.800	9738.000	1457.400	9784.000
GR	1456.200	9827.000	1456.900	9865.000	1456.900	9891.000	1456.400	9909.000	1456.400	9934.000
GR	1457.100	9966.000	1454.600	9985.000	1454.500	10000.000	1454.800	10016.000	1459.800	10032.000
GR	1456.200	10044.000	1454.800	10058.000	1456.400	10082.000	1456.300	10116.000	1456.200	10153.000
GR	1457.000	10175.000	1463.500	10188.000	1463.200	10199.000	1458.200	10208.000	1457.200	10219.000
GR	1456.500	10262.000	1456.900	10308.000	1456.600	10356.000	1456.500	10404.000	1456.800	10457.000
GR	1457.400	10510.000	1456.800	10564.000	1458.100	10609.000	1464.200	10632.000	1469.600	10656.000
GR	1470.800	10676.000	1469.300	10687.000	1469.900	10699.000	1470.700	10715.000	1471.300	10737.000

GR	1475.600	10754.000	1478.200	10775.000	1479.300	10792.000	.000	.000	.000	.000
X1	.890	51.000	9971.000	10014.000	740.000	400.000	570.000	.000	.000	.000
ET	.000	.000	.000	6.100	.000	9836.000	10014.000	.000	.000	.000
GR	1474.800	8814.000	1474.000	8871.000	1471.500	8924.000	1469.400	8956.000	1466.600	8987.000
GR	1466.000	9000.000	1465.000	9003.000	1464.300	9029.000	1464.200	9045.000	1463.900	9067.000
GR	1463.000	9106.000	1462.300	9172.000	1460.900	9240.000	1461.400	9304.000	1460.800	9366.000
GR	1460.300	9431.000	1459.900	9498.000	1460.100	9549.000	1460.200	9605.000	1459.600	9673.000
GR	1459.700	9743.000	1459.700	9813.000	1459.700	9875.000	1459.000	9900.000	1457.900	9910.000
GR	1457.300	9915.000	1458.900	9919.000	1459.100	9931.000	1458.500	9941.000	1459.000	9950.000
GR	1460.300	9971.000	1454.000	9987.000	1454.800	10000.000	1458.900	10014.000	1458.300	10030.000
GR	1458.100	10049.000	1458.300	10066.000	1458.500	10094.000	1459.600	10109.000	1459.600	10110.000
GR	1459.700	10113.000	1460.800	10147.000	1461.000	10176.000	1460.400	10195.000	1460.500	10215.000
GR	1462.500	10230.000	1465.200	10260.000	1468.100	10289.000	1472.700	10329.000	1477.600	10376.000
GR	1479.400	10402.000	.000	.000	.000	.000	.000	.000	.000	.000
X1	.985	54.000	9978.000	10019.000	600.000	490.000	502.000	.000	.000	.000
ET	.000	.000	.000	6.100	8.400	9895.000	10019.000	.000	.000	.000
GR	1480.500	8830.000	1480.300	8883.000	1479.200	8936.000	1478.300	8998.000	1476.200	9044.000
GR	1474.000	9095.000	1471.800	9127.000	1467.600	9159.000	1464.600	9178.000	1466.700	9185.000
GR	1465.000	9189.000	1464.600	9226.000	1463.800	9279.000	1464.200	9337.000	1463.300	9397.000
GR	1463.400	9455.000	1462.800	9522.000	1462.700	9591.000	1462.800	9663.000	1462.800	9714.000
GR	1463.200	9759.000	1463.100	9802.000	1463.400	9849.000	1462.000	9862.000	1459.500	9874.000
GR	1460.300	9878.000	1461.200	9883.000	1460.900	9891.000	1459.900	9903.000	1459.600	9913.000
GR	1458.900	9918.000	1461.500	9923.000	1461.200	9930.000	1459.000	9933.000	1459.900	9942.000
GR	1461.800	9951.000	1461.300	9963.000	1461.200	9978.000	1459.000	9986.000	1458.500	9989.000
GR	1458.100	10000.000	1459.700	10008.000	1459.600	10015.000	1461.500	10019.000	1461.800	10025.000
GR	1460.900	10047.000	1461.700	10056.000	1462.100	10074.000	1464.200	10103.000	1466.100	10143.000
GR	1468.700	10185.000	1470.900	10226.000	1472.200	10248.000	1475.900	10275.000	.000	.000
X1	1.120	42.000	9974.000	10037.000	640.000	730.000	713.000	.000	.000	.000
ET	.000	.000	.000	6.100	9.400	9944.000	10037.000	.000	.000	.000
GR	1472.100	9032.000	1472.100	9033.000	1472.100	9034.000	1471.300	9076.000	1468.600	9113.000
GR	1467.700	9148.000	1467.600	9191.000	1468.100	9243.000	1467.900	9281.000	1468.300	9294.000
GR	1469.200	9305.000	1468.600	9333.000	1469.300	9348.000	1470.300	9360.000	1470.500	9380.000
GR	1470.100	9419.000	1469.300	9460.000	1469.000	9504.000	1468.200	9557.000	1467.900	9610.000
GR	1467.300	9674.000	1467.000	9734.000	1466.900	9796.000	1466.200	9854.000	1465.500	9897.000
GR	1463.500	9942.000	1463.800	9974.000	1463.500	9990.000	1461.100	10000.000	1461.100	10027.000
GR	1465.100	10037.000	1464.900	10050.000	1464.200	10058.000	1463.600	10064.000	1465.200	10076.000
GR	1466.300	10097.000	1467.300	10116.000	1467.500	10123.000	1469.800	10141.000	1470.600	10158.000
GR	1471.600	10184.000	1471.000	10194.000	.000	.000	.000	.000	.000	.000
X1	1.207	29.000	9997.000	10030.000	450.000	480.000	459.000	.000	.000	.000
ET	.000	.000	.000	6.100	9.400	9934.000	10030.000	.000	.000	.000
GR	1471.300	9479.000	1470.900	9520.000	1469.600	9537.000	1471.200	9556.000	1470.400	9584.000
GR	1470.300	9604.000	1471.500	9633.000	1470.900	9665.000	1468.900	9685.000	1469.800	9708.000
GR	1469.800	9726.000	1471.300	9750.000	1471.500	9784.000	1470.000	9812.000	1468.100	9832.000
GR	1466.700	9853.000	1468.400	9862.000	1467.400	9891.000	1467.200	9920.000	1466.800	9953.000
GR	1467.300	9986.000	1466.500	9997.000	1463.000	10000.000	1463.000	10019.000	1466.000	10030.000
GR	1466.000	10037.000	1467.300	10047.000	1474.700	10069.000	1480.400	10099.000	.000	.000

X1	1.288	29.000	9994.000	10032.000	380.000	440.000	428.000	.000	.000	.000
ET	.000	.000	.000	6.100	8.400	9929.000	10032.000	.000	.000	.000
GR	1471.600	8665.000	1471.600	9784.000	1471.600	9785.000	1470.800	9812.000	1470.400	9822.000
GR	1471.100	9832.000	1470.100	9850.000	1470.200	9867.000	1470.200	9876.000	1471.000	9892.000
GR	1470.200	9915.000	1467.700	9939.000	1468.700	9956.000	1468.500	9971.000	1469.000	9983.000
GR	1469.100	9994.000	1465.500	10000.000	1465.800	10020.000	1469.200	10024.000	1470.200	10032.000
GR	1469.400	10047.000	1468.000	10050.000	1469.300	10057.000	1470.000	10072.000	1471.500	10092.000
GR	1474.500	10129.000	1475.600	10166.000	1478.800	10199.000	1479.600	10232.000	.000	.000
X1	1.383	21.000	9992.000	10030.000	470.000	510.000	502.000	.000	.000	.000
ET	.000	.000	.000	6.100	8.400	9961.000	10030.000	.000	.000	.000
GR	1475.100	9719.000	1475.100	9720.000	1475.000	9767.000	1474.400	9805.000	1474.300	9823.000
GR	1473.900	9855.000	1473.600	9898.000	1472.600	9933.000	1471.200	9964.000	1471.800	9981.000
GR	1471.900	9992.000	1469.500	9998.000	1467.200	10000.000	1468.100	10022.000	1472.600	10030.000
GR	1472.600	10038.000	1472.100	10049.000	1475.900	10071.000	1484.100	10110.000	1495.600	10168.000
GR	1508.800	10219.000	.000	.000	.000	.000	.000	.000	.000	.000
QT	4.000	1609.000	1609.000	1609.000	1609.000	.000	.000	.000	.000	.000
X1	1.483	24.000	9971.000	10025.000	530.000	528.000	528.000	.000	.000	.000
ET	.000	.000	.000	6.100	8.400	9971.000	10040.000	.000	.000	.000
GR	1478.900	9787.000	1478.900	9788.000	1478.900	9789.000	1478.900	9790.000	1478.900	9791.000
GR	1478.700	9814.000	1478.100	9836.000	1476.500	9857.000	1477.100	9887.000	1477.000	9916.000
GR	1476.700	9947.000	1476.200	9971.000	1474.100	9991.000	1470.000	10000.000	1470.200	10017.000
GR	1473.100	10021.000	1474.300	10025.000	1474.400	10036.000	1474.700	10058.000	1475.100	10074.000
GR	1476.300	10095.000	1480.100	10118.000	1488.400	10125.000	1499.300	10217.000	.000	.000
X1	1.572	29.000	9985.000	10020.000	410.000	500.000	470.000	.000	.000	.000
ET	.000	.000	.000	6.100	9.400	9938.000	10051.000	.000	.000	.000
GR	1480.900	9695.000	1480.900	9696.000	1480.900	9697.000	1480.900	9698.000	1480.600	9742.000
GR	1479.900	9785.000	1480.100	9832.000	1478.900	9867.000	1477.400	9899.000	1476.100	9923.000
GR	1476.100	9945.000	1476.300	9968.000	1477.400	9985.000	1476.500	9994.000	1475.100	9998.000
GR	1473.700	10000.000	1474.000	10005.000	1474.200	10015.000	1476.500	10020.000	1476.300	10026.000
GR	1476.900	10046.000	1477.400	10072.000	1477.800	10103.000	1478.000	10141.000	1479.400	10176.000
GR	1480.500	10209.000	1482.000	10221.000	1485.000	10243.000	1489.500	10271.000	.000	.000
X1	1.638	21.000	9970.000	10020.000	360.000	330.000	350.000	.000	.000	.000
ET	.000	.000	.000	6.100	9.400	9958.000	10020.000	.000	.000	.000
GR	1483.000	9582.000	1483.000	9583.000	1482.900	9671.000	1482.900	9750.000	1481.900	9810.000
GR	1480.500	9849.000	1479.300	9907.000	1478.600	9933.000	1478.800	9949.000	1479.500	9970.000
GR	1475.700	9984.000	1475.700	10000.000	1479.800	10020.000	1479.700	10052.000	1480.300	10084.000
GR	1479.900	10100.000	1482.100	10122.000	1482.500	10140.000	1485.400	10167.000	1488.400	10194.000
GR	1488.700	10203.000	.000	.000	.000	.000	.000	.000	.000	.000
X1	1.695	37.000	9978.000	10016.000	297.000	303.000	300.000	.000	.000	.000
ET	.000	9.100	.000	6.100	8.400	9950.000	10072.000	.000	9830.000	.000
GR	1484.600	9443.000	1484.600	9444.000	1484.600	9445.000	1484.600	9546.000	1484.600	9547.000
GR	1483.400	9609.000	1483.100	9660.000	1482.200	9713.000	1482.300	9735.000	1483.200	9749.000
GR	1484.000	9773.000	1483.900	9791.000	1484.200	9814.000	1485.200	9830.000	1483.700	9868.000
GR	1483.500	9887.000	1481.600	9906.000	1480.200	9926.000	1480.500	9952.000	1481.500	9978.000
GR	1477.300	9992.000	1477.400	10000.000	1477.400	10008.000	1481.300	10016.000	1480.700	10039.000
GR	1480.800	10058.000	1481.500	10086.000	1480.400	10110.000	1481.400	10120.000	1481.600	10142.000
GR	1482.400	10177.000	1483.900	10212.000	1485.100	10249.000	1485.900	10285.000	1486.300	10320.000
GR	1487.000	10350.000	1487.300	10362.000	.000	.000	.000	.000	.000	.000

X1	1.761	40.000	9980.000	10017.000	360.000	340.000	350.000	.000	.000	.000
ET	.000	.000	.000	6.100	.000	9980.000	10041.000	.000	.000	.000
GR	1489.800	9478.000	1489.800	9479.000	1489.800	9480.000	1489.800	9481.000	1489.800	9482.000
GR	1489.500	9517.000	1489.500	9557.000	1488.900	9599.000	1488.000	9639.000	1487.600	9678.000
GR	1486.400	9718.000	1486.100	9758.000	1486.300	9800.000	1487.600	9839.000	1487.900	9874.000
GR	1487.500	9905.000	1485.500	9931.000	1482.900	9958.000	1483.200	9980.000	1479.100	9988.000
GR	1479.100	10000.000	1479.200	10008.000	1483.200	10017.000	1483.300	10052.000	1484.000	10091.000
GR	1484.000	10122.000	1483.300	10159.000	1484.000	10200.000	1484.500	10238.000	1484.400	10280.000
GR	1484.400	10319.000	1484.800	10342.000	1483.200	10355.000	1485.400	10371.000	1486.000	10410.000
GR	1486.100	10453.000	1487.000	10496.000	1487.700	10542.000	1488.400	10582.000	1488.800	10614.000
X1	1.856	31.000	9980.000	10019.000	502.000	502.000	502.000	.000	.000	.000
ET	.000	.000	.000	6.100	.000	9974.000	10024.000	.000	.000	.000
GR	1492.500	9703.000	1492.500	9704.000	1492.500	9705.000	1492.500	9706.000	1492.500	9707.000
GR	1492.400	9750.000	1491.900	9791.000	1490.500	9830.000	1489.300	9865.000	1487.900	9901.000
GR	1486.700	9941.000	1484.500	9980.000	1480.700	9989.000	1480.900	10000.000	1480.900	10009.000
GR	1485.200	10019.000	1485.100	10038.000	1487.500	10065.000	1489.300	10093.000	1489.800	10123.000
GR	1489.500	10155.000	1488.200	10182.000	1487.600	10219.000	1488.600	10257.000	1488.400	10300.000
GR	1488.900	10340.000	1489.300	10381.000	1490.400	10402.000	1493.200	10419.000	1498.700	10460.000
GR	1500.900	10473.000	.000	.000	.000	.000	.000	.000	.000	.000
X1	1.951	33.000	9981.000	10011.000	510.000	495.000	502.000	.000	.000	.000
ET	.000	.000	.000	6.100	8.400	9945.000	10011.000	.000	.000	.000
GR	1497.000	9414.000	1497.000	9415.000	1497.000	9416.000	1497.000	9417.000	1496.600	9498.000
GR	1496.300	9579.000	1495.500	9661.000	1495.000	9741.000	1494.800	9806.000	1493.900	9858.000
GR	1492.300	9881.000	1488.800	9909.000	1485.900	9938.000	1486.300	9965.000	1486.700	9981.000
GR	1483.100	9989.000	1482.900	10000.000	1483.000	10006.000	1486.100	10011.000	1489.200	10026.000
GR	1491.000	10061.000	1490.900	10099.000	1490.300	10145.000	1491.000	10190.000	1491.200	10242.000
GR	1492.100	10289.000	1493.100	10339.000	1494.100	10388.000	1494.800	10429.000	1495.500	10457.000
GR	1502.000	10488.000	1505.700	10523.000	1508.700	10544.000	.000	.000	.000	.000
X1	2.045	34.000	9988.000	10019.000	505.000	510.000	505.000	.000	.000	.000
ET	.000	.000	.000	6.100	8.400	9939.000	10050.000	.000	.000	.000
GR	1499.600	9478.000	1499.200	9519.000	1498.900	9562.000	1499.000	9607.000	1498.700	9640.000
GR	1497.800	9681.000	1497.400	9721.000	1496.900	9765.000	1496.300	9806.000	1494.600	9840.000
GR	1491.100	9867.000	1490.300	9911.000	1489.500	9949.000	1489.500	9963.000	1490.900	9978.000
GR	1490.900	9988.000	1486.600	9995.000	1486.700	10000.000	1486.600	10010.000	1491.200	10019.000
GR	1490.100	10048.000	1488.000	10057.000	1490.900	10066.000	1490.700	10094.000	1491.700	10120.000
GR	1492.000	10158.000	1492.400	10199.000	1493.200	10238.000	1493.900	10280.000	1493.600	10321.000
GR	1493.700	10360.000	1494.200	10384.000	1502.100	10422.000	1502.700	10425.000	.000	.000
QT	4.000	1308.000	1308.000	1308.000	1308.000	.000	.000	.000	.000	.000
X1	2.121	19.000	9980.000	10019.000	405.000	415.000	410.000	.000	.000	.000
ET	.000	.000	.000	6.100	8.400	9976.000	10019.000	.000	.000	.000
GR	1503.600	9596.000	1502.300	9639.000	1502.200	9681.000	1501.800	9722.000	1501.300	9768.000
GR	1500.500	9813.000	1499.700	9853.000	1498.400	9888.000	1496.700	9921.000	1492.800	9947.000
GR	1492.100	9980.000	1488.700	9990.000	1489.300	10000.000	1490.500	10010.000	1493.600	10019.000
GR	1493.000	10048.000	1494.800	10079.000	1496.400	10110.000	1497.100	10133.000	.000	.000
X1	2.200	20.000	9959.000	10036.000	400.000	425.000	417.000	.000	.000	.000

ET	.000	.000	.000	6.100	8.400	9845.000	10036.000	.000	.000	.000
GR	1502.000	9511.000	1500.000	9566.000	1498.800	9612.000	1496.900	9654.000	1495.700	9701.000
GR	1494.200	9741.000	1494.100	9781.000	1493.000	9811.000	1494.700	9824.000	1493.500	9837.000
GR	1493.400	9863.000	1493.100	9891.000	1495.600	9903.000	1495.300	9930.000	1496.100	9959.000
GR	1495.000	9970.000	1491.500	9981.000	1491.400	10000.000	1490.500	10017.000	1498.500	10036.000
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=    .100 CEHV=    .300
*SECNO  .710
      .71    10.92  1460.42  1456.08  1460.42  1460.42      .00      .00      .00  1456.30
    2304.     926.     211.    1167.    2089.     328.    2341.       0.       0.   1456.00
      .00      .44      .64      .50     .055     .055     .055     .000  1449.50  9436.73
  .000040       0.       0.       0.        0       17        0      .00  1064.97 10501.70
0
FLOW DISTRIBUTION FOR SECNO=       .71          CWSEL=   1460.42

STA=    9437.    9574.    9668.    9710.    9748.    9798.    9852.    9887.    9917.    9952.    9975.    9985.   10025.
  PER Q=      4.4      5.3      3.5      3.4      3.6      4.9      3.5      3.2      4.4      3.1      1.0      9.1
   AREA=    307.6    316.8    179.0    168.9    193.7    240.9    165.2    149.1    191.2    130.4     46.7    328.2
    VEL=       .3       .4       .5       .5       .4       .5       .5       .5       .5       .5       .5       .6
STA=   10025.   10061.   10105.   10165.   10224.   10267.   10316.   10363.   10405.   10458.   10502.
  PER Q=      3.4      5.2      7.3      6.9      5.2      5.7      5.1      4.2      4.9      2.8
   AREA=    165.1    231.9    322.2    308.0    228.8    255.8    235.9    200.3    239.6    153.3
    VEL=       .5       .5       .5       .5       .5       .5       .5       .5       .5       .4

*SECNO  .782

3265 DIVIDED FLOW

      .78     5.94  1460.44  1457.27      .00  1460.45      .01      .02      .00  1457.10
    2304.     565.     272.    1467.     827.     318.    2030.      34.       8.   1459.80
      .14      .68      .85      .72     .055     .055     .055     .000  1454.50  9693.49
  .000125     380.     380.     360.        0       14        0      .00   902.21 10617.80
0
FLOW DISTRIBUTION FOR SECNO=       .78          CWSEL=   1460.44

STA=    9693.    9827.    9865.    9909.    9934.    9966.   10032.   10058.   10082.   10116.   10153.   10219.   10262.
  PER Q=      7.7      4.8      5.0      3.4      3.7     11.8      3.3      4.3      4.7      5.3      3.7      4.7
   AREA=    300.1    147.6    160.0    100.9    117.9    318.1     98.3    116.0    138.9    154.8    130.8    154.2
    VEL=       .6       .7       .7       .8       .7       .9       .8       .9       .8       .8       .7       .7
STA=   10262.   10308.   10356.   10404.   10457.   10510.   10564.   10609.   10618.
  PER Q=      5.4      5.5      6.0      6.4      5.2      5.3      3.7       .1
   AREA=    171.8    176.9    186.5    200.6    176.8    180.1    134.3     10.3
    VEL=       .7       .7       .7       .7       .7       .7       .6       .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  .890

3265 DIVIDED FLOW

      .89     6.51  1460.51  1460.07      .00  1460.71      .20      .20      .06  1460.30
    2304.     793.     894.     617.     429.     185.     210.      58.      19.   1458.90
      .19     1.85     4.85     2.94     .055     .055     .055     .000  1454.00  9403.45
  .004875     740.     570.     400.        2        5        0      .00   758.28 10215.09
0
FLOW DISTRIBUTION FOR SECNO=       .89          CWSEL=   1460.51

STA=    9403.    9605.    9743.    9813.    9875.    9910.    9919.    9941.    9971.   10014.   10030.   10049.   10066.
  PER Q=      3.5      6.9      4.1      3.6      5.4      3.8      4.0      3.2     38.8      3.9      6.3      5.6
   AREA=     76.9    102.0     56.8     50.3     49.7     24.2     35.3     34.0    184.5     30.6     43.9     39.3
    VEL=      1.1      1.6      1.6      1.6      2.5      3.6      2.6      2.2      4.8      2.9      3.3      3.3
STA=   10066.   10094.   10138.   10215.
  PER Q=      8.0      3.0       .0
   AREA=     59.1     35.6      1.4
    VEL=      3.1      2.0       .3

#SECNO  .985

3265 DIVIDED FLOW

      .99     5.12  1463.22  1462.20      .00  1463.43      .21     2.72      .00  1461.20
    2304.    1265.     777.     263.     420.     163.     100.      67.      28.   1461.50
      .23     3.01     4.78     2.63     .055     .055     .055     .000  1458.10  9475.46
  .005132     600.     502.     490.        3       14        0      .00   583.56 10089.42
0
FLOW DISTRIBUTION FOR SECNO=       .99          CWSEL=   1463.22

STA=    9475.    9663.    9874.    9883.    9903.    9913.    9918.    9930.    9942.    9951.    9978.   10019.   10047.
  PER Q=      3.6      6.2      4.3      8.1      6.7      4.1      4.1      8.3      3.1      6.3     33.7      6.3
   AREA=     75.5     71.4     25.6     51.1     34.7     19.8     28.2     43.3     21.3     49.5    162.6     50.5
    VEL=      1.1      2.0      3.9      3.6      4.4      4.8      3.4      4.4      3.4      2.9      4.8      2.9
STA=   10047.   10074.   10089.
  PER Q=      4.6       .5
   AREA=     41.0      8.6
    VEL=      2.6      1.3
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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 1.120
     1.12     5.47  1466.57  1465.40      .00  1466.85      .28     3.40      .02  1463.80
    2304.     695.    1340.     269.     224.     272.      97.      77.      35.   1465.10
      .27     3.10     4.92     2.78     .055     .055     .055     .000  1461.10  9822.88
  .004823     640.     713.     730.        2       15        0      .00   279.35 10102.23
0
 FLOW DISTRIBUTION FOR SECNO=      1.12          CWSEL=   1466.57

 STA=    9823.    9854.    9897.    9942.    9974.   10037.   10050.   10058.   10064.   10076.   10097.   10102.
   PER Q=      .2      2.1     12.4     15.6     58.1      2.3      2.1      2.5      3.5      1.2       .0
    AREA=     5.8     31.2     93.4     93.6    272.2     20.5     16.2     16.1     26.1     17.3       .7
     VEL=      .6      1.5      3.1      3.8      4.9      2.5      3.0      3.6      3.1      1.6       .5

 #SECNO 1.207

 3265 DIVIDED FLOW

     1.21     6.05  1469.05  1468.48      .00  1469.46      .42     2.57      .04  1466.50
    2304.     948.    1155.     201.     294.     178.      50.      83.      38.   1466.00
      .30     3.22     6.49     4.04     .055     .055     .055     .000  1463.00  9683.53
  .006618     450.     459.     480.        2        5        0      .00   235.41 10052.20
0
 FLOW DISTRIBUTION FOR SECNO=      1.21          CWSEL=   1469.05

 STA=    9684.    9853.    9891.    9920.    9953.    9986.    9997.   10030.   10037.   10047.   10052.
   PER Q=     4.9      5.1      7.0     10.4     10.0      3.7     50.1      4.3      4.1       .4
    AREA=    39.7     46.8     50.7     67.6     65.9     23.6    177.8     21.3     24.0      4.5
     VEL=     2.8      2.5      3.2      3.5      3.5      3.7      6.5      4.6      3.9      1.9

 #SECNO 1.288
     1.29     6.07  1471.57  1470.58      .00  1471.82      .25     2.34      .02  1469.10
    2304.    1112.     894.     297.     346.     175.     101.      89.      40.   1470.20
      .33     3.21     5.10     2.95     .055     .055     .055     .000  1465.50  9785.99
  .005026     380.     428.     440.        2       14        0      .00   306.88 10092.87
0
 FLOW DISTRIBUTION FOR SECNO=      1.29          CWSEL=   1471.57
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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


STA=    9786.    9850.    9876.    9915.    9939.    9956.    9971.    9983.    9994.   10032.   10047.   10057.   10072.
  PER Q=      3.3      3.8      3.1      9.9     10.7      7.7      5.6      4.3     38.8      3.2      4.8      3.7
   AREA=     45.4     36.5     37.9     62.9     57.3     44.6     33.8     27.7    175.3     26.6     29.1     28.8
    VEL=      1.6      2.4      1.9      3.6      4.3      4.0      3.8      3.5      5.1      2.8      3.8      3.0
STA=   10072.   10093.
  PER Q=      1.2
   AREA=     16.4
    VEL=      1.7

*SECNO 1.383
     1.38     7.07  1474.27  1473.50      .00  1474.77      .50     2.87      .07  1471.90
    2304.     746.    1411.     147.     215.     210.     48.      95.      43.   1472.60
      .35     3.46     6.71     3.06     .055     .055     .055     .000  1467.20  9825.65
  .006917     470.     502.     510.        2        8        0      .00   235.90 10061.55
0
FLOW DISTRIBUTION FOR SECNO=      1.38          CWSEL=   1474.27

STA=    9826.    9855.    9898.    9933.    9964.    9981.    9992.   10030.   10038.   10049.   10062.
  PER Q=       .2      1.4      4.4     12.7      9.0      4.7     61.2      1.8      3.2      1.4
   AREA=      5.4     22.2     40.8     73.4     47.0     26.6    210.1     13.3     21.1     13.6
    VEL=       .7      1.4      2.5      4.0      4.4      4.0      6.7      3.2      3.5      2.3

*SECNO 1.483
     1.48     7.26  1477.26  1475.67      .00  1477.50      .23     2.71      .03  1476.20
    1609.      59.    1075.     475.      56.     248.     165.     100.      46.   1474.30
      .39     1.05     4.34     2.87     .055     .055     .055     .000  1470.00  9846.96
  .003559     530.     528.     528.        2       15        0      .00   253.88 10100.84
0
FLOW DISTRIBUTION FOR SECNO=      1.48          CWSEL=   1477.26

STA=    9847.    9857.    9887.    9916.    9947.    9971.   10025.   10036.   10058.   10074.   10095.   10101.
  PER Q=       .2       .8       .2       .7      1.7     66.8      6.6     11.6      6.7      4.4       .2
   AREA=      3.8     13.9      6.2     12.9     19.6    247.7     32.1     59.7     37.8     32.9      2.8
    VEL=       .8      1.0       .6       .9      1.4      4.3      3.3      3.1      2.9      2.2      1.0

*SECNO 1.572
     1.57     5.28  1478.98  1477.85      .00  1479.11      .13     1.60      .01  1477.40
    1609.     668.     492.     449.     243.     133.     206.     106.      49.   1476.50
      .44     2.75     3.71     2.18     .055     .055     .055     .000  1473.70  9864.78
  .003339     410.     470.     500.        3       14        0      .00   300.62 10165.40
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


 FLOW DISTRIBUTION FOR SECNO=      1.57          CWSEL=   1478.98

 STA=    9865.    9923.    9945.    9968.    9985.   10020.   10046.   10072.   10103.   10141.   10165.
   PER Q=     11.1     12.4     12.2      5.8     30.6     11.0      6.9      5.1      4.2       .7
    AREA=     79.9     63.3     63.8     36.1    132.6     63.0     47.5     42.7     40.9     11.9
     VEL=      2.2      3.2      3.1      2.6      3.7      2.8      2.3      1.9      1.6      1.0

 #SECNO 1.638
      1.64     4.89  1480.59  1480.22      .00  1480.99      .39     1.80      .08  1479.50
     1609.     454.    1041.     114.     145.     177.      57.     110.      51.   1479.80
       .46     3.14     5.87     1.99     .055     .055     .055     .000  1475.70  9846.17
   .008925     360.     350.     330.        2        9        0      .00   260.84 10107.02
0
 FLOW DISTRIBUTION FOR SECNO=      1.64          CWSEL=   1480.59

 STA=    9846.    9907.    9933.    9949.    9970.   10020.   10052.   10084.   10100.   10107.
   PER Q=      5.1      9.5      7.4      6.2     64.7      3.9      2.2       .8       .2
    AREA=     40.8     42.9     30.4     30.5    177.5     27.3     19.3      8.0      2.5
     VEL=      2.0      3.6      3.9      3.3      5.9      2.3      1.8      1.6      1.3

 #SECNO 1.695

 3470 ENCROACHMENT STATIONS=    9830.0   10362.0  TYPE=      1  TARGET=   -9830.000
      1.70     5.34  1482.64  1481.93      .00  1482.83      .19     1.82      .02  1481.50
     1609.     391.     700.     518.     143.     156.     222.     113.      53.   1481.30
       .48     2.73     4.49     2.34     .055     .055     .055     .000  1477.30  9895.54
   .004413     297.     300.     303.        2       10        0      .00   287.20 10182.74
0
 FLOW DISTRIBUTION FOR SECNO=      1.70          CWSEL=   1482.64

 STA=    9896.    9926.    9952.    9978.   10016.   10039.   10056.   10086.   10110.   10142.   10183.
   PER Q=      6.0     11.6      6.7     43.5      5.9      5.5      6.5      6.5      5.9      1.9
    AREA=     40.4     59.7     42.8    156.1     37.9     32.2     44.9     40.7     42.7     23.3
     VEL=      2.4      3.1      2.5      4.5      2.5      2.7      2.3      2.6      2.2      1.3

 #SECNO 1.761

 3265 DIVIDED FLOW

      1.76     5.41  1484.51  1484.37      .00  1484.97      .45     2.06      .08  1483.20
     1609.     131.    1061.     417.      46.     165.     192.     117.      56.   1483.20
       .50     2.86     6.45     2.17     .055     .055     .055     .000  1479.10  9941.24
   .008296     360.     350.     340.        2        5        0      .00   404.57 10364.56
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


FLOW DISTRIBUTION FOR SECNO=      1.76          CWSEL=   1484.51

STA=    9941.    9980.   10017.   10052.   10091.   10159.   10200.   10365.
  PER Q=      8.1     66.0      7.9      4.7      6.0      4.9      2.4
   AREA=     45.7    164.6     44.2     33.7     47.9     35.4     30.9
    VEL=      2.9      6.4      2.9      2.2      2.0      2.2      1.2

#SECNO 1.856
     1.86     6.79  1487.49  1485.96      .00  1487.86      .37     2.88      .01  1484.50
    1609.     208.    1201.     201.      84.     221.      77.     121.      59.   1485.20
      .53     2.46     5.42     2.62     .055     .055     .055     .000  1480.70  9914.57
  .004202     502.     502.     502.        2        8        0      .00   150.35 10064.92
0
FLOW DISTRIBUTION FOR SECNO=      1.86          CWSEL=   1487.49

STA=    9915.    9941.    9980.   10019.   10038.   10065.
  PER Q=       .6     12.3     74.6      8.5      3.9
   AREA=     10.5     73.8    221.4     44.5     32.2
    VEL=       .9      2.7      5.4      3.1      2.0

#SECNO 1.951
     1.95     6.63  1489.53  1487.86      .00  1489.81      .28     1.94      .01  1486.70
    1609.     674.     866.      69.     206.     173.      29.     126.      61.   1486.10
      .57     3.27     5.00     2.35     .055     .055     .055     .000  1482.90  9903.18
  .003554     510.     502.     495.        3       19        0      .00   129.20 10032.38
0
FLOW DISTRIBUTION FOR SECNO=      1.95          CWSEL=   1489.53

STA=    9903.    9909.    9938.    9965.    9981.   10011.   10026.   10032.
  PER Q=       .1     10.6     21.1     10.1     53.8      4.2       .0
   AREA=      2.1     63.2     92.6     48.4    173.2     28.2      1.0
    VEL=       .8      2.7      3.7      3.4      5.0      2.4       .5

#SECNO 2.045
     2.05     5.27  1491.87  1491.32      .00  1492.11      .24     2.30      .00  1490.90
    1609.     591.     651.     367.     198.     127.     133.     131.      63.   1491.20
      .60     2.99     5.12     2.76     .055     .055     .055     .000  1486.60  9860.99
  .006023     505.     505.     510.        2       14        0      .00   281.64 10142.63
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


FLOW DISTRIBUTION FOR SECNO=      2.05          CWSEL=   1491.87

STA=    9861.    9911.    9949.    9963.    9978.    9988.   10019.   10048.   10057.   10066.   10094.   10143.
  PER Q=      7.7     15.4      7.7      4.6      1.3     40.5      5.3      6.5      5.0      4.1      1.8
   AREA=     54.2     75.2     33.3     25.2      9.8    127.1     35.6     25.5     21.9     30.2     19.7
    VEL=      2.3      3.3      3.7      3.0      2.1      5.1      2.4      4.1      3.7      2.2      1.5

*SECNO 2.121
     2.12     5.73  1494.43  1493.71      .00  1494.85      .42     2.68      .05  1492.10
    1308.     255.     939.     114.      74.     161.      50.     134.      65.   1493.60
      .62     3.44     5.83     2.27     .055     .055     .055     .000  1488.70  9936.16
  .007299     405.     410.     415.        2       11        0      .00   136.41 10072.57
0
FLOW DISTRIBUTION FOR SECNO=      2.12          CWSEL=   1494.43

STA=    9936.    9947.    9980.   10019.   10048.   10073.
  PER Q=      1.3     18.1     71.8      6.2      2.5
   AREA=      8.8     65.2    161.2     32.7     17.5
    VEL=      2.0      3.6      5.8      2.5      1.8

*SECNO 2.200

3265 DIVIDED FLOW

     2.20     5.50  1496.00  1494.33      .00  1496.06      .06     1.18      .04  1496.10
    1308.     728.     580.       0.     431.     244.       0.     139.      67.   1498.50
      .68     1.69     2.38      .00     .055     .055     .055     .000  1490.50  9689.15
  .001521     400.     417.     425.        3       23        0      .00   336.41 10030.07
0
FLOW DISTRIBUTION FOR SECNO=      2.20          CWSEL=   1496.00

STA=    9689.    9701.    9741.    9781.    9811.    9824.    9837.    9863.    9891.    9903.    9930.    9955.   10036.
  PER Q=       .0      3.5      9.0     10.8      3.7      3.1     10.0     12.2      2.2       .8       .4     44.3
   AREA=      1.8     42.1     74.1     73.6     28.0     24.7     66.4     77.1     19.8     14.9      8.9    243.7
    VEL=       .3      1.1      1.6      1.9      1.7      1.6      2.0      2.1      1.5       .7       .5      2.4
```

THIS RUN EXECUTED 11/25/87 15:07:53

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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 1.1
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T1 FLOOD PLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DIST.
T2 FLD'WAY ENCROACH CALC. (METHOD 4 W/1.0 W.S. RISE) 100 YR/6 HR STORM
T3 BUCHANAN WASH SKUNK CREEK TO C.A.P. CANAL OCT, 1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	3.	0.	0.	.000000	.00	.0	0.	1461.420	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	.000	-1.000	.000	.000	.000	-1.000	.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 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
*SECNO  .710
 2800 NAT Q1=   3640.20  WSEL=   1460.42  ENC Q1=   3640.20  WSEL=   1461.42  RATIO=   .0000
 NAT Q1=   5025.  RATIOS LOB,CH,ROB=   .4213   .0803   .4984  WSEL=   1461.42

3470 ENCROACHMENT STATIONS=    9693.2   10351.0  TYPE=     4  TARGET=        .276
      .71    11.92  1461.42  1456.12  1460.42  1461.43      .01      .00      .00  1456.30
    2304.     901.     255.    1148.    1659.     368.    2013.       0.       0.   1456.00
      .00      .54      .69      .57     .055     .055     .055     .000  1449.50  9693.17
  .000040       0.       0.       0.        0       10        0      .00   657.83 10351.00
0
*SECNO  .782
 2800 NAT Q1=   2060.39  WSEL=   1460.44  ENC Q1=   2060.39  WSEL=   1461.44  RATIO=   .0000
 NAT Q1=   3084.  RATIOS LOB,CH,ROB=   .2559   .1081   .6360  WSEL=   1461.44

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    9889.2   10446.8  TYPE=     4  TARGET=        .332
      .78     6.94  1461.44  1457.35  1460.44  1461.45      .01      .02      .00  1457.10
    2304.     315.     372.    1617.     370.     384.    1887.      28.       5.   1459.80
      .12      .85      .97      .86     .055     .055     .055     .000  1454.50  9889.19
  .000125     380.     380.     360.        0       16        0      .00   539.31 10446.80
0
*SECNO  .890
 2800 NAT Q1=    330.00  WSEL=   1460.51  ENC Q1=    330.00  WSEL=   1461.51  RATIO=   .0000
 NAT Q1=    798.  RATIOS LOB,CH,ROB=   .5271   .2275   .2454  WSEL=   1461.51

3470 ENCROACHMENT STATIONS=    9836.4   10014.0  TYPE=     4  TARGET=        .587
      .89     7.41  1461.41  1460.47  1460.51  1461.77      .36      .21      .11  1460.30
    2304.    1034.    1270.       0.     295.     223.       0.      47.       9.   1458.90
      .15     3.50     5.69      .00     .055     .055     .055     .000  1454.00  9836.36
  .005607     740.     570.     400.        2       10        0      .00   177.64 10014.00
0
*SECNO  .985
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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


 2800 NAT Q1=    321.63  WSEL=   1463.22  ENC Q1=    321.63  WSEL=   1464.22  RATIO=   .0000
 NAT Q1=    699.  RATIOS LOB,CH,ROB=   .6522   .2259   .1220  WSEL=   1464.22

3470 ENCROACHMENT STATIONS=    9904.6   10019.0  TYPE=     4  TARGET=        .540
      .99     6.21  1464.31  1462.48  1463.22  1464.68      .37     2.91      .00  1461.20
    2304.    1204.    1100.      0.     272.     207.       0.      53.      11.   1461.50
      .18     4.43     5.31     .00     .055     .055     .055     .000  1458.10  9904.55
  .004995     600.     502.     490.       3       14        0      .00   114.45 10019.00
0
 #SECNO 1.120
 2800 NAT Q1=    331.76  WSEL=   1466.57  ENC Q1=    331.76  WSEL=   1467.57  RATIO=   .0000
 NAT Q1=    579.  RATIOS LOB,CH,ROB=   .3805   .4714   .1481  WSEL=   1467.57

3470 ENCROACHMENT STATIONS=    9948.8   10037.0  TYPE=     4  TARGET=        .427
     1.12     6.53  1467.63  1465.48  1466.57  1468.07      .44     3.38      .02  1463.80
    2304.     423.    1881.      0.     100.     339.       0.      60.      13.   1465.10
      .22     4.25     5.55     .00     .055     .055     .055     .000  1461.10  9948.76
  .004831     640.     713.     730.       3       19        0      .00    88.24 10037.00
0
 #SECNO 1.207
 2800 NAT Q1=    283.22  WSEL=   1469.05  ENC Q1=    283.22  WSEL=   1470.05  RATIO=   .0000
 NAT Q1=    486.  RATIOS LOB,CH,ROB=   .5218   .3882   .0900  WSEL=   1470.05

3470 ENCROACHMENT STATIONS=    9941.3   10030.0  TYPE=     4  TARGET=        .417
     1.21     7.13  1470.13  1468.75  1469.05  1470.74      .60     2.62      .05  1466.50
    2304.     818.    1486.      0.     175.     214.       0.      64.      14.   1466.00
      .24     4.66     6.96     .00     .055     .055     .055     .000  1463.00  9941.27
  .006906     450.     459.     480.       2       15        0      .00    88.73 10030.00
0
 #SECNO 1.288
 2800 NAT Q1=    325.01  WSEL=   1471.57  ENC Q1=    325.01  WSEL=   1472.57  RATIO=   .0000
 NAT Q1=    859.  RATIOS LOB,CH,ROB=   .6944   .2036   .1020  WSEL=   1472.57
3280 CROSS SECTION      1.29 EXTENDED      1.08 FEET


3470 ENCROACHMENT STATIONS=    9938.4   10032.0  TYPE=     4  TARGET=        .622
     1.29     7.18  1472.68  1470.68  1471.57  1473.11      .42     2.35      .02  1469.10
    2304.    1090.    1214.      0.     228.     218.       0.      68.      15.   1470.20
      .26     4.79     5.58     .00     .055     .055     .055     .000  1465.50  9938.39
  .004877     380.     428.     440.       3       19        0      .00    93.61 10032.00
0
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   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 1.383
  2800 NAT Q1=    277.02  WSEL=   1474.27  ENC Q1=    277.02  WSEL=   1475.27  RATIO=   .0000
  NAT Q1=    469.  RATIOS LOB,CH,ROB=   .4394   .4768   .0838  WSEL=   1475.27
 3280 CROSS SECTION      1.38 EXTENDED       .23 FEET


 3470 ENCROACHMENT STATIONS=    9966.2   10030.0  TYPE=     4  TARGET=        .410
      1.38     8.13  1475.33  1473.50  1474.27  1476.08      .74     2.87      .10  1471.90
     2304.     465.    1839.       0.      94.     250.       0.      73.      16.   1472.60
       .28     4.93     7.34      .00     .055     .055     .055     .000  1467.20  9966.23
   .007145     470.     502.     510.        2       15        0      .00    63.77 10030.00
0
 *SECNO 1.483
  2800 NAT Q1=    269.72  WSEL=   1477.26  ENC Q1=    269.72  WSEL=   1478.26  RATIO=   .0000
  NAT Q1=    459.  RATIOS LOB,CH,ROB=   .1393   .5452   .3155  WSEL=   1478.26

 3470 ENCROACHMENT STATIONS=    9971.0   10034.4  TYPE=     4  TARGET=        .412
      1.48     8.45  1478.45  1475.55  1477.26  1478.78      .34     2.67      .04  1476.20
     1609.       0.    1487.     122.       0.     311.      39.      77.      16.   1474.30
       .31      .00     4.77     3.16     .055     .055     .055     .000  1470.00  9971.00
   .003345     530.     528.     528.        3       14        0      .00    63.45 10034.45
0
 *SECNO 1.572
  2800 NAT Q1=    278.45  WSEL=   1478.98  ENC Q1=    278.45  WSEL=   1479.98  RATIO=   .0000
  NAT Q1=    522.  RATIOS LOB,CH,ROB=   .4154   .2411   .3435  WSEL=   1479.98

 3470 ENCROACHMENT STATIONS=    9941.2   10048.1  TYPE=     4  TARGET=        .466
      1.57     6.37  1480.07  1478.06  1478.98  1480.30      .23     1.51      .01  1477.40
     1609.     549.     728.     332.     159.     171.      98.      81.      17.   1476.50
       .35     3.46     4.27     3.39     .055     .055     .055     .000  1473.70  9941.18
   .003155     410.     470.     500.        2       11        0      .00   106.92 10048.10
0
 *SECNO 1.638
  2800 NAT Q1=    170.31  WSEL=   1480.59  ENC Q1=    170.31  WSEL=   1481.59  RATIO=   .0000
  NAT Q1=    348.  RATIOS LOB,CH,ROB=   .3647   .4781   .1573  WSEL=   1481.59

 3301 HV CHANGED MORE THAN HVINS


 3470 ENCROACHMENT STATIONS=    9965.1   10020.0  TYPE=     4  TARGET=        .510
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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


     1.64     5.81  1481.51  1480.24  1480.59  1482.27      .76     1.81      .16  1479.50
    1609.      35.    1574.       0.      10.     223.       0.      84.      18.   1479.80
      .36     3.45     7.06      .00     .055     .055     .055     .000  1475.70  9965.10
  .009944     360.     350.     330.        2       19        0      .00    54.90 10020.00
0
 #SECNO 1.695
  2800 NAT Q1=    242.22  WSEL=   1482.64  ENC Q1=    242.22  WSEL=   1483.64  RATIO=   .0000
  NAT Q1=    493.  RATIOS LOB,CH,ROB=   .3086   .3067   .3847  WSEL=   1483.64

 3470 ENCROACHMENT STATIONS=    9955.7   10060.6  TYPE=     4  TARGET=        .509
     1.70     6.49  1483.79  1482.26  1482.64  1484.09      .30     1.78      .05  1481.50
    1609.     183.     994.     432.      61.     199.     129.      86.      18.   1481.30
      .38     3.02     4.99     3.34     .055     .055     .055     .000  1477.30  9955.68
  .003932     297.     300.     303.        2       10        0      .00   104.88 10060.56
0
 #SECNO 1.761
  2800 NAT Q1=    176.65  WSEL=   1484.51  ENC Q1=    176.65  WSEL=   1485.51  RATIO=   .0000
  NAT Q1=    403.  RATIOS LOB,CH,ROB=   .0947   .4051   .5001  WSEL=   1485.51

 3301 HV CHANGED MORE THAN HVINS


 3470 ENCROACHMENT STATIONS=    9980.0   10030.5  TYPE=     4  TARGET=        .562
     1.76     6.34  1485.44  1484.09  1484.51  1486.26      .82     2.01      .16  1483.20
    1609.       0.    1488.     121.       0.     199.      30.      88.      19.   1483.20
      .39      .00     7.47     4.02     .055     .055     .055     .000  1479.10  9980.00
  .009298     360.     350.     340.        2       15        0      .00    50.47 10030.47
0
 #SECNO 1.856
  2800 NAT Q1=    248.22  WSEL=   1487.49  ENC Q1=    248.22  WSEL=   1488.49  RATIO=   .0000
  NAT Q1=    393.  RATIOS LOB,CH,ROB=   .1956   .6179   .1865  WSEL=   1488.49

 3470 ENCROACHMENT STATIONS=    9978.0   10019.7  TYPE=     4  TARGET=        .368
     1.86     7.96  1488.66  1485.56  1487.49  1489.20      .55     2.91      .03  1484.50
    1609.      17.    1589.       3.       8.     267.       2.      91.      20.   1485.20
      .42     2.08     5.96     1.16     .055     .055     .055     .000  1480.70  9978.00
  .003961     502.     502.     502.        2       15        0      .00    41.67 10019.67
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


 #SECNO 1.951
  2800 NAT Q1=    269.89  WSEL=   1489.53  ENC Q1=    269.89  WSEL=   1490.53  RATIO=   .0000
  NAT Q1=    404.  RATIOS LOB,CH,ROB=   .4645   .4692   .0663  WSEL=   1490.53

 3470 ENCROACHMENT STATIONS=    9951.0   10011.0  TYPE=     4  TARGET=        .332
      1.95     7.85  1490.75  1488.05  1489.53  1491.11      .36     1.89      .02  1486.70
     1609.     520.    1089.       0.     132.     210.       0.      95.      20.   1486.10
       .44     3.95     5.19      .00     .055     .055     .055     .000  1482.90  9950.97
   .003564     510.     502.     495.        2       14        0      .00    60.04 10011.00
0
 #SECNO 2.045
  2800 NAT Q1=    207.33  WSEL=   1491.87  ENC Q1=    207.33  WSEL=   1492.87  RATIO=   .0000
  NAT Q1=    416.  RATIOS LOB,CH,ROB=   .4012   .2890   .3098  WSEL=   1492.87

 3470 ENCROACHMENT STATIONS=    9946.3   10045.5  TYPE=     4  TARGET=        .502
      2.05     6.36  1492.96  1491.71  1491.87  1493.36      .40     2.24      .01  1490.90
     1609.     482.     931.     196.     120.     161.      60.      99.      21.   1491.20
       .47     4.03     5.80     3.27     .055     .055     .055     .000  1486.60  9946.30
   .005655     505.     505.     510.        2       14        0      .00    99.21 10045.51
0
 #SECNO 2.121
  2800 NAT Q1=    153.10  WSEL=   1494.43  ENC Q1=    157.80  WSEL=   1495.43  RATIO=  -.0307
  NAT Q1=    265.  RATIOS LOB,CH,ROB=   .2350   .5954   .1696  WSEL=   1495.43

 3470 ENCROACHMENT STATIONS=    9980.0   10019.0  TYPE=     4  TARGET=        .405
      2.12     6.76  1495.46  1493.54  1494.43  1496.11      .66     2.68      .08  1492.10
     1308.       0.    1308.       0.       0.     201.       0.     101.      22.   1493.60
       .49      .00     6.50      .00     .055     .055     .055     .000  1488.70  9980.00
   .007939     405.     410.     415.        2       15        0      .00    39.00 10019.00
0
 #SECNO 2.200
  2800 NAT Q1=    335.33  WSEL=   1496.00  ENC Q1=    335.33  WSEL=   1497.00  RATIO=   .0000
  NAT Q1=    604.  RATIOS LOB,CH,ROB=   .6333   .3667   .0000  WSEL=   1497.00

 3301 HV CHANGED MORE THAN HVINS


 3470 ENCROACHMENT STATIONS=    9862.0   10036.0  TYPE=     4  TARGET=        .445
      2.20     6.67  1497.17  1494.32  1496.00  1497.26      .09     1.09      .06  1496.10
     1308.     456.     852.       0.     238.     329.       0.     105.      23.   1498.50
       .54     1.92     2.59      .00     .055     .055     .055     .000  1490.50  9861.96
   .001299     400.     417.     425.        1       11        0      .00   170.91 10032.87
0
```

THIS RUN EXECUTED 11/25/87 15:09:58

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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 1.1
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T1      FLOOD PLAIN ANALYSIS  -  MARICOPA COUNTY FLOOD CONTROL DIST.
T2      FLD'WAY ENCROACH CALC. (METHOD 1)                    100 YR/6 HR STORM
T3      BUCHANAN WASH          SKUNK CREEK TO C.A.P. CANAL   OCT, 1987

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.        4.        0.        0.   .000000       .00        .0        0.  1461.420      .000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     3.000      .000    -1.000      .000      .000      .000    -1.000      .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 3

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
#SECNO  .710

3470 ENCROACHMENT STATIONS=    9693.0   10351.0  TYPE=     1  TARGET=     658.000
      .71    11.92  1461.42  1456.12  1460.42  1461.43      .01      .00      .00  1456.30
    2304.     901.     255.    1147.    1660.     368.    2013.       0.       0.   1456.00
      .00      .54      .69      .57     .055     .055     .055     .000  1449.50  9693.00
  .000040       0.       0.       0.        0       10        0      .00   658.00 10351.00
0
#SECNO  .782

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    9889.0   10446.0  TYPE=     1  TARGET=     557.000
      .78     6.94  1461.44  1457.35  1460.44  1461.45      .01      .02      .00  1457.10
    2304.     316.     372.    1616.     371.     384.    1882.      28.       5.   1459.80
      .12      .85      .97      .86     .055     .055     .055     .000  1454.50  9889.00
  .000125     380.     380.     360.        0       16        0      .00   538.69 10446.00
0
#SECNO  .890

3470 ENCROACHMENT STATIONS=    9836.0   10014.0  TYPE=     1  TARGET=     178.000
      .89     7.41  1461.41  1460.47  1460.51  1461.77      .36      .21      .11  1460.30
    2304.    1035.    1269.       0.     296.     223.       0.      47.       9. 100000.00
      .15     3.50     5.69      .00     .055     .055     .055     .000  1454.00  9836.00
  .005619     740.     570.     400.        2       10        0      .00   178.00 10014.00
0
#SECNO  .985

3470 ENCROACHMENT STATIONS=    9895.0   10019.0  TYPE=     1  TARGET=     124.000
      .99     6.11  1464.21  1462.36  1463.22  1464.54      .33     2.77      .00  1461.20
    2304.    1289.    1015.       0.     303.     203.       0.      53.      11. 100000.00
      .18     4.25     4.99      .00     .055     .055     .055     .000  1458.10  9895.00
  .004512     600.     502.     490.        3       14        0      .00   124.00 10019.00
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


 *SECNO 1.120

 3470 ENCROACHMENT STATIONS=    9944.0   10037.0  TYPE=     1  TARGET=      93.000
      1.12     6.32  1467.42  1465.44  1466.57  1467.87      .44     3.29      .03  1463.80
     2304.     487.    1817.       0.     113.     325.       0.      60.      13. 100000.00
       .22     4.31     5.58      .00     .055     .055     .055     .000  1461.10  9944.00
   .005125     640.     713.     730.        2       19        0      .00    93.00 10037.00
0
 *SECNO 1.207

 3470 ENCROACHMENT STATIONS=    9934.0   10030.0  TYPE=     1  TARGET=      96.000
      1.21     7.02  1470.02  1468.72  1469.05  1470.59      .57     2.69      .04  1466.50
     2304.     867.    1437.       0.     191.     210.       0.      65.      14. 100000.00
       .24     4.54     6.85      .00     .055     .055     .055     .000  1463.00  9934.00
   .006827     450.     459.     480.        2       15        0      .00    96.00 10030.00
0
 *SECNO 1.288

 3470 ENCROACHMENT STATIONS=    9929.0   10032.0  TYPE=     1  TARGET=     103.000
      1.29     7.02  1472.52  1470.55  1471.57  1472.90      .38     2.29      .02  1469.10
     2304.    1165.    1139.       0.     258.     211.       0.      69.      15. 100000.00
       .26     4.51     5.39      .00     .055     .055     .055     .000  1465.50  9929.00
   .004721     380.     428.     440.        1       19        0      .00   103.00 10032.00
0
 *SECNO 1.383

 3470 ENCROACHMENT STATIONS=    9961.0   10030.0  TYPE=     1  TARGET=      69.000
      1.38     7.91  1475.11  1473.45  1474.27  1475.83      .71     2.83      .10  1471.90
     2304.     550.    1754.       0.     109.     242.       0.      73.      16. 100000.00
       .28     5.06     7.24      .00     .055     .055     .055     .000  1467.20  9961.00
   .007209     470.     502.     510.        2       15        0      .00    69.00 10030.00
0
 *SECNO 1.483

 3470 ENCROACHMENT STATIONS=    9971.0   10040.0  TYPE=     1  TARGET=      69.000
      1.48     8.23  1478.23  1475.59  1477.26  1478.55      .32     2.69      .04  1476.20
     1609.       0.    1406.     203.       0.     300.      58.      78.      17.   1474.30
       .32      .00     4.68     3.50     .055     .055     .055     .000  1470.00  9971.00
   .003362     530.     528.     528.        1       16        0      .00    69.00 10040.00
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


 *SECNO 1.572

 3470 ENCROACHMENT STATIONS=    9938.0   10051.0  TYPE=     1  TARGET=     113.000
      1.57     6.19  1479.89  1478.02  1478.98  1480.12      .23     1.56      .01  1477.40
     1609.     563.     707.     339.     163.     165.     102.      82.      18.   1476.50
       .35     3.45     4.29     3.33     .055     .055     .055     .000  1473.70  9938.00
   .003353     410.     470.     500.        3       11        0      .00   113.00 10051.00
0
 *SECNO 1.638

 3470 ENCROACHMENT STATIONS=    9958.0   10020.0  TYPE=     1  TARGET=      62.000
      1.64     5.72  1481.42  1480.26  1480.59  1482.13      .71     1.87      .14  1479.50
     1609.     100.    1509.       0.      25.     219.       0.      85.      18. 100000.00
       .36     3.92     6.90      .00     .055     .055     .055     .000  1475.70  9958.00
   .009759     360.     350.     330.        2       19        0      .00    62.00 10020.00
0
 *SECNO 1.695

 3470 ENCROACHMENT STATIONS=    9950.0   10072.0  TYPE=     1  TARGET=     122.000
      1.70     6.32  1483.62  1482.13  1482.64  1483.88      .26     1.70      .04  1481.50
     1609.     224.     915.     470.      74.     193.     151.      87.      19.   1481.30
       .38     3.02     4.74     3.11     .055     .055     .055     .000  1477.30  9950.00
   .003710     297.     300.     303.        2        9        0      .00   122.00 10072.00
0
 *SECNO 1.761

 3301 HV CHANGED MORE THAN HVINS


 3470 ENCROACHMENT STATIONS=    9980.0   10041.0  TYPE=     1  TARGET=      61.000
      1.76     6.13  1485.23  1484.17  1484.51  1486.01      .78     1.97      .16  1483.20
     1609.       0.    1418.     191.       0.     191.      48.      90.      20.   1483.20
       .40      .00     7.42     3.99     .055     .055     .055     .000  1479.10  9980.00
   .009661     360.     350.     340.        2       15        0      .00    61.00 10041.00
0
 *SECNO 1.856

 3470 ENCROACHMENT STATIONS=    9974.0   10024.0  TYPE=     1  TARGET=      50.000
      1.86     7.76  1488.46  1485.66  1487.49  1488.95      .49     2.91      .03  1484.50
     1609.      68.    1498.      43.      23.     259.      16.      93.      20.   1485.20
       .42     2.98     5.78     2.65     .055     .055     .055     .000  1480.70  9974.00
   .003871     502.     502.     502.        2       15        0      .00    50.00 10024.00
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


 *SECNO 1.951

 3470 ENCROACHMENT STATIONS=    9945.0   10011.0  TYPE=     1  TARGET=      66.000
      1.95     7.59  1490.49  1487.98  1489.53  1490.83      .34     1.86      .02  1486.70
     1609.     583.    1026.       0.     151.     202.       0.      96.      21. 100000.00
       .45     3.87     5.08      .00     .055     .055     .055     .000  1482.90  9945.00
   .003543     510.     502.     495.        3       14        0      .00    66.00 10011.00
0
 *SECNO 2.045

 3470 ENCROACHMENT STATIONS=    9939.0   10050.0  TYPE=     1  TARGET=     111.000
      2.05     6.13  1492.73  1491.69  1491.87  1493.10      .37     2.26      .01  1490.90
     1609.     519.     875.     215.     133.     153.      66.     101.      22.  1491.20
       .48     3.92     5.70     3.25     .055     .055     .055     .000  1486.60  9939.00
   .005820     505.     505.     510.        2       18        0      .00   111.00 10050.00
0
 *SECNO 2.121

 3470 ENCROACHMENT STATIONS=    9976.0   10019.0  TYPE=     1  TARGET=      43.000
      2.12     6.53  1495.23  1493.53  1494.43  1495.88      .66     2.70      .08  1492.10
     1308.      43.    1265.       0.      12.     192.       0.     103.      23. 100000.00
       .50     3.46     6.58      .00     .055     .055     .055     .000  1488.70  9976.00
   .007756     405.     410.     415.        2       15        0      .00    43.00 10019.00
0
 *SECNO 2.200

 3301 HV CHANGED MORE THAN HVINS


 3470 ENCROACHMENT STATIONS=    9845.0   10036.0  TYPE=     1  TARGET=     191.000
      2.20     6.45  1496.95  1494.29  1496.00  1497.03      .08     1.09      .06  1496.10
     1308.     520.     788.       0.     275.     312.       0.     107.      24. 100000.00
       .55     1.89     2.53      .00     .055     .055     .055     .000  1490.50  9845.00
   .001312     400.     417.     425.        3       14        0      .00   187.32 10032.32
0
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THIS RUN EXECUTED 11/25/87 15:11:49

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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 1.1
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T1 FLOOD PLAIN ANALYSIS - MARICOPA COUNTY FLOOD CONTROL DIST.
T2 FLD'WAY ENCROACH CALC. (METHOD 4 REVISED) 100 YR/6 HR STORM
T3 BUCHANAN WASH SKUNK CREEK TO C.A.P. CANAL OCT, 1987

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	5.	0.	0.	.000000	.00	.0	0.	1461.420	.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	.000	-1.000	.000	.000	.000	-1.000	.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 4

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV=    .100 CEHV=    .300
#SECNO  .710
 2800 NAT Q1=   3640.20  WSEL=   1460.42  ENC Q1=   3640.20  WSEL=   1461.42  RATIO=   .0000
 NAT Q1=   5025.  RATIOS LOB,CH,ROB=   .4213   .0803   .4984  WSEL=   1461.42

3470 ENCROACHMENT STATIONS=    9693.2   10351.0  TYPE=     4  TARGET=        .276
      .71    11.92  1461.42  1456.12  1460.42  1461.43      .01      .00      .00  1456.30
    2304.     901.     255.    1148.    1659.     368.    2013.       0.       0.   1456.00
      .00      .54      .69      .57     .055     .055     .055     .000  1449.50  9693.17
  .000040       0.       0.       0.        0       10        0      .00   657.83 10351.00
0
#SECNO  .782
 2800 NAT Q1=   2060.39  WSEL=   1460.44  ENC Q1=   2060.39  WSEL=   1461.44  RATIO=   .0000
 NAT Q1=   3084.  RATIOS LOB,CH,ROB=   .2559   .1081   .6360  WSEL=   1461.44

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    9889.2   10446.8  TYPE=     4  TARGET=        .332
      .78     6.94  1461.44  1457.35  1460.44  1461.45      .01      .02      .00  1457.10
    2304.     315.     372.    1617.     370.     384.    1887.      28.       5.   1459.80
      .12      .85      .97      .86     .055     .055     .055     .000  1454.50  9889.19
  .000125     380.     380.     360.        0       16        0      .00   539.31 10446.80
0
#SECNO  .890
 2800 NAT Q1=    330.00  WSEL=   1460.51  ENC Q1=    330.00  WSEL=   1461.51  RATIO=   .0000
 NAT Q1=    798.  RATIOS LOB,CH,ROB=   .5271   .2275   .2454  WSEL=   1461.51

3470 ENCROACHMENT STATIONS=    9836.4   10014.0  TYPE=     4  TARGET=        .587
      .89     7.41  1461.41  1460.47  1460.51  1461.77      .36      .21      .11  1460.30
    2304.    1034.    1270.       0.     295.     223.       0.      47.       9.   1458.90
      .15     3.50     5.69      .00     .055     .055     .055     .000  1454.00  9836.36
  .005607     740.     570.     400.        2       10        0      .00   177.64 10014.00
0
#SECNO  .985
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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


 2800 NAT Q1=    321.63  WSEL=   1463.22  ENC Q1=    321.63  WSEL=   1464.02  RATIO=   .0000
 NAT Q1=    605.  RATIOS LOB,CH,ROB=   .6338   .2439   .1223  WSEL=   1464.02

3470 ENCROACHMENT STATIONS=    9895.7   10019.0  TYPE=     4  TARGET=        .468
      .99     6.12  1464.22  1462.36  1463.22  1464.55      .33     2.78      .00  1461.20
    2304.    1284.    1020.       0.     301.     204.       0.      53.      11.   1461.50
      .18     4.27     5.01      .00     .055     .055     .055     .000  1458.10  9895.73
  .004545     600.     502.     490.        3       14        0      .00   123.27 10019.00
0
 ‡SECNO 1.120
 2800 NAT Q1=    331.76  WSEL=   1466.57  ENC Q1=    331.76  WSEL=   1467.47  RATIO=   .0000
 NAT Q1=    548.  RATIOS LOB,CH,ROB=   .3716   .4824   .1459  WSEL=   1467.47

3470 ENCROACHMENT STATIONS=    9944.6   10037.0  TYPE=     4  TARGET=        .394
     1.12     6.33  1467.43  1465.44  1466.57  1467.88      .44     3.30      .03  1463.80
    2304.     478.    1826.       0.     111.     327.       0.      60.      13.   1465.10
      .22     4.31     5.59      .00     .055     .055     .055     .000  1461.10  9944.65
  .005107     640.     713.     730.        2       19        0      .00    92.35 10037.00
0
 ‡SECNO 1.207
 2800 NAT Q1=    283.22  WSEL=   1469.05  ENC Q1=    283.22  WSEL=   1469.95  RATIO=   .0000
 NAT Q1=    462.  RATIOS LOB,CH,ROB=   .5126   .3975   .0899  WSEL=   1469.95

3470 ENCROACHMENT STATIONS=    9934.9   10030.0  TYPE=     4  TARGET=        .387
     1.21     7.03  1470.03  1468.72  1469.05  1470.61      .58     2.69      .04  1466.50
    2304.     861.    1443.       0.     189.     210.       0.      65.      14.   1466.00
      .24     4.56     6.87      .00     .055     .055     .055     .000  1463.00  9934.88
  .006862     450.     459.     480.        2       15        0      .00    95.12 10030.00
0
 ‡SECNO 1.288
 2800 NAT Q1=    325.01  WSEL=   1471.57  ENC Q1=    325.01  WSEL=   1472.37  RATIO=   .0000
 NAT Q1=    712.  RATIOS LOB,CH,ROB=   .6605   .2313   .1082  WSEL=   1472.37
3280 CROSS SECTION      1.29 EXTENDED       .92 FEET


3470 ENCROACHMENT STATIONS=    9928.9   10032.0  TYPE=     4  TARGET=        .544
     1.29     7.03  1472.53  1470.55  1471.57  1472.91      .38     2.29      .02  1469.10
    2304.    1167.    1137.       0.     259.     211.       0.      69.      15.   1470.20
      .26     4.50     5.38      .00     .055     .055     .055     .000  1465.50  9928.92
  .004687     380.     428.     440.        2       19        0      .00   103.08 10032.00
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


*SECNO 1.383
 2800 NAT Q1=    277.02  WSEL=   1474.27  ENC Q1=    277.02  WSEL=   1475.07  RATIO=   .0000
 NAT Q1=    424.  RATIOS LOB,CH,ROB=   .4173   .5016   .0810  WSEL=   1475.07
3280 CROSS SECTION      1.38 EXTENDED       .01 FEET


3470 ENCROACHMENT STATIONS=    9961.4   10030.0  TYPE=     4  TARGET=        .346
     1.38     7.92  1475.12  1473.45  1474.27  1475.84      .72     2.82      .10  1471.90
    2304.     546.    1758.       0.     107.     242.       0.      73.      16.   1472.60
      .28     5.08     7.26      .00     .055     .055     .055     .000  1467.20  9961.37
  .007241     470.     502.     510.        2       15        0      .00    68.63 10030.00
0
*SECNO 1.483
 2800 NAT Q1=    269.72  WSEL=   1477.26  ENC Q1=    269.72  WSEL=   1478.06  RATIO=   .0000
 NAT Q1=    415.  RATIOS LOB,CH,ROB=   .1195   .5668   .3137  WSEL=   1478.06

3470 ENCROACHMENT STATIONS=    9971.0   10040.3  TYPE=     4  TARGET=        .351
     1.48     8.24  1478.24  1475.59  1477.26  1478.56      .32     2.69      .04  1476.20
    1609.       0.    1403.     206.       0.     300.      59.      78.      17.   1474.30
      .32      .00     4.67     3.49     .055     .055     .055     .000  1470.00  9971.00
  .003355     530.     528.     528.        2       16        0      .00    69.27 10040.27
0
*SECNO 1.572
 2800 NAT Q1=    278.45  WSEL=   1478.98  ENC Q1=    278.45  WSEL=   1479.88  RATIO=   .0000
 NAT Q1=    493.  RATIOS LOB,CH,ROB=   .4155   .2460   .3385  WSEL=   1479.88

3470 ENCROACHMENT STATIONS=    9937.8   10051.5  TYPE=     4  TARGET=        .436
     1.57     6.20  1479.90  1478.01  1478.98  1480.13      .22     1.55      .01  1477.40
    1609.     563.     704.     342.     164.     165.     103.      82.      18.   1476.50
      .35     3.44     4.28     3.31     .055     .055     .055     .000  1473.70  9937.84
  .003329     410.     470.     500.        2       11        0      .00   113.70 10051.54
0
*SECNO 1.638
 2800 NAT Q1=    170.31  WSEL=   1480.59  ENC Q1=    170.31  WSEL=   1481.49  RATIO=   .0000
 NAT Q1=    327.  RATIOS LOB,CH,ROB=   .3587   .4906   .1507  WSEL=   1481.49

3470 ENCROACHMENT STATIONS=    9958.5   10020.0  TYPE=     4  TARGET=        .479
     1.64     5.72  1481.42  1480.26  1480.59  1482.13      .71     1.86      .15  1479.50
    1609.      95.    1514.       0.      24.     219.       0.      85.      18.   1479.80
      .36     3.91     6.92      .00     .055     .055     .055     .000  1475.70  9958.47
  .009816     360.     350.     330.        2       19        0      .00    61.53 10020.00
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


 ‡SECNO 1.695
  2800 NAT Q1=    242.22  WSEL=   1482.64  ENC Q1=    242.22  WSEL=   1483.44  RATIO=   .0000
  NAT Q1=    433.  RATIOS LOB,CH,ROB=   .2948   .3272   .3780  WSEL=   1483.44

 3470 ENCROACHMENT STATIONS=    9951.1   10071.3  TYPE=     4  TARGET=        .440
      1.70     6.33  1483.63  1482.14  1482.64  1483.90      .27     1.72      .04  1481.50
     1609.     219.     921.     469.      71.     193.     150.      87.      19.   1481.30
       .38     3.07     4.76     3.13     .055     .055     .055     .000  1477.30  9951.07
   .003741     297.     300.     303.        2        9        0      .00   120.25 10071.31
0
 ‡SECNO 1.761
  2800 NAT Q1=    176.65  WSEL=   1484.51  ENC Q1=    176.65  WSEL=   1485.31  RATIO=   .0000
  NAT Q1=    348.  RATIOS LOB,CH,ROB=   .0934   .4414   .4652  WSEL=   1485.31

 3470 ENCROACHMENT STATIONS=    9980.0   10043.8  TYPE=     4  TARGET=        .492
      1.76     6.14  1485.24  1484.18  1484.51  1485.99      .75     1.95      .14  1483.20
     1609.       0.    1396.     213.       0.     192.      54.      90.      20.   1483.20
       .40      .00     7.28     3.95     .055     .055     .055     .000  1479.10  9980.00
   .009234     360.     350.     340.        2       15        0      .00    63.78 10043.78
0
 ‡SECNO 1.856
  2800 NAT Q1=    248.22  WSEL=   1487.49  ENC Q1=    248.22  WSEL=   1488.29  RATIO=   .0000
  NAT Q1=    358.  RATIOS LOB,CH,ROB=   .1835   .6444   .1721  WSEL=   1488.29

 3470 ENCROACHMENT STATIONS=    9974.7   10023.8  TYPE=     4  TARGET=        .307
      1.86     7.73  1488.43  1485.65  1487.49  1488.93      .51     2.92      .02  1484.50
     1609.      59.    1510.      41.      20.     258.      15.      93.      20.   1485.20
       .42     2.93     5.86     2.65     .055     .055     .055     .000  1480.70  9974.70
   .004005     502.     502.     502.        2       15        0      .00    49.07 10023.77
0
 ‡SECNO 1.951
  2800 NAT Q1=    269.89  WSEL=   1489.53  ENC Q1=    269.89  WSEL=   1490.33  RATIO=   .0000
  NAT Q1=    375.  RATIOS LOB,CH,ROB=   .4574   .4815   .0612  WSEL=   1490.33

 3470 ENCROACHMENT STATIONS=    9945.6   10011.0  TYPE=     4  TARGET=        .279
      1.95     7.61  1490.51  1487.98  1489.53  1490.85      .34     1.90      .02  1486.70
     1609.     577.    1032.       0.     148.     202.       0.      96.      21.   1486.10
       .45     3.88     5.10      .00     .055     .055     .055     .000  1482.90  9945.58
   .003569     510.     502.     495.        2       23        0      .00    65.42 10011.00
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


*SECNO 2.045
 2800 NAT Q1=    207.33  WSEL=   1491.87  ENC Q1=    207.33  WSEL=   1492.67  RATIO=   .0000
 NAT Q1=    366.  RATIOS LOB,CH,ROB=   .3990   .3072   .2939  WSEL=   1492.67

3470 ENCROACHMENT STATIONS=    9939.1   10050.9  TYPE=     4  TARGET=        .434
     2.05     6.14  1492.74  1491.68  1491.87  1493.11      .37     2.25      .01  1490.90
    1609.     517.     869.     223.     133.     154.      69.     101.      22.   1491.20
      .48     3.89     5.65     3.23     .055     .055     .055     .000  1486.60  9939.05
  .005701     505.     505.     510.        2       18        0      .00   111.81 10050.87
0
*SECNO 2.121
 2800 NAT Q1=    153.10  WSEL=   1494.43  ENC Q1=    153.10  WSEL=   1495.23  RATIO=   .0000
 NAT Q1=    240.  RATIOS LOB,CH,ROB=   .2291   .6166   .1542  WSEL=   1495.23

3470 ENCROACHMENT STATIONS=    9976.5   10019.0  TYPE=     4  TARGET=        .361
     2.12     6.51  1495.21  1493.53  1494.43  1495.88      .67     2.68      .09  1492.10
    1308.      36.    1272.       0.      11.     192.       0.     103.      23.   1493.60
      .50     3.36     6.63      .00     .055     .055     .055     .000  1488.70  9976.46
  .007899     405.     410.     415.        2       15        0      .00    42.54 10019.00
0
*SECNO 2.200
 2800 NAT Q1=    335.33  WSEL=   1496.00  ENC Q1=    335.33  WSEL=   1496.80  RATIO=   .0000
 NAT Q1=    543.  RATIOS LOB,CH,ROB=   .6211   .3789   .0000  WSEL=   1496.80

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9845.3   10036.0  TYPE=     4  TARGET=        .382
     2.20     6.45  1496.95  1494.29  1496.00  1497.03      .08     1.09      .06  1496.10
    1308.     519.     789.       0.     274.     312.       0.     107.      24.   1498.50
      .55     1.89     2.53      .00     .055     .055     .055     .000  1490.50  9845.32
  .001309     400.     417.     425.        1       14        0      .00   187.01 10032.33
0
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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 1.1
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

BUCHANAN WASH

SUMMARY PRINTOUT TABLE 110

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
.710	1460.42	.00	1460.42	1064.97	925.88	210.74	1167.38	.00	.00	9985.00	10025.00	.00
.710	1461.42	1.00	1461.43	657.83	901.10	255.20	1147.70	.28	9693.17	9985.00	10025.00	10351.00
.710	1461.42	1.00	1461.43	658.00	901.37	255.15	1147.48	658.00	9693.00	9985.00	10025.00	10351.00
.710	1461.42	1.00	1461.43	657.83	901.10	255.20	1147.70	.28	9693.17	9985.00	10025.00	10351.00
.782	1460.44	.00	1460.45	902.21	565.22	271.71	1467.08	.00	.00	9966.00	10032.00	.00
.782	1461.44	1.00	1461.45	539.31	315.04	371.59	1617.38	.33	9889.19	9966.00	10032.00	10446.80
.782	1461.44	1.00	1461.45	538.69	315.87	372.07	1616.06	557.00	9889.00	9966.00	10032.00	10446.00
.782	1461.44	1.00	1461.45	539.31	315.04	371.59	1617.38	.33	9889.19	9966.00	10032.00	10446.80
.890	1460.51	.00	1460.71	758.28	792.59	894.24	617.17	.00	.00	9971.00	10014.00	.00
.890	1461.41	.89	1461.77	177.64	1034.49	1269.51	.00	.59	9836.36	9971.00	10014.00	10014.00
.890	1461.41	.89	1461.77	178.00	1034.60	1269.40	.00	178.00	9836.00	9971.00	10014.00	10014.00
.890	1461.41	.89	1461.77	177.64	1034.49	1269.51	.00	.59	9836.36	9971.00	10014.00	10014.00
.985	1463.22	.00	1463.43	583.56	1264.54	776.71	262.75	.00	.00	9978.00	10019.00	.00
.985	1464.31	1.09	1464.68	114.45	1204.18	1099.82	.00	.54	9904.55	9978.00	10019.00	10019.00
.985	1464.21	.99	1464.54	124.00	1289.24	1014.76	.00	124.00	9895.00	9978.00	10019.00	10019.00
.985	1464.22	1.00	1464.55	123.27	1284.37	1019.63	.00	.47	9895.73	9978.00	10019.00	10019.00

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
1.383	1474.27	.00	1474.77	235.90	746.30	1410.59	147.11	.00	.00	9992.00	10030.00	.00
1.383	1475.33	1.07	1476.08	63.77	464.66	1839.33	.00	.41	9966.23	9992.00	10030.00	10030.00
1.383	1475.11	.85	1475.83	69.00	550.27	1753.73	.00	69.00	9961.00	9992.00	10030.00	10030.00
1.383	1475.12	.85	1475.84	68.63	545.66	1758.34	.00	.35	9961.37	9992.00	10030.00	10030.00
1.483	1477.26	.00	1477.50	253.88	59.33	1074.63	475.04	.00	.00	9971.00	10025.00	.00
1.483	1478.45	1.18	1478.78	63.45	.00	1486.69	122.31	.41	9971.00	9971.00	10025.00	10034.45
1.483	1478.23	.97	1478.55	69.00	.00	1405.90	203.09	69.00	9971.00	9971.00	10025.00	10040.00
1.483	1478.24	.98	1478.56	69.27	.00	1403.05	205.95	.35	9971.00	9971.00	10025.00	10040.27
1.572	1478.98	.00	1479.11	300.62	668.24	491.68	449.07	.00	.00	9985.00	10020.00	.00
1.572	1480.07	1.10	1480.30	106.92	548.71	728.38	331.91	.47	9941.18	9985.00	10020.00	10048.10
1.572	1479.89	.92	1480.12	113.00	563.18	707.31	338.51	113.00	9938.00	9985.00	10020.00	10051.00
1.572	1479.90	.92	1480.13	113.70	562.93	704.41	341.67	.44	9937.84	9985.00	10020.00	10051.54
1.638	1480.59	.00	1480.99	260.84	454.05	1041.41	113.54	.00	.00	9970.00	10020.00	.00
1.638	1481.51	.91	1482.27	54.90	35.42	1573.58	.00	.51	9965.10	9970.00	10020.00	10020.00
1.638	1481.42	.83	1482.13	62.00	99.85	1509.15	.00	62.00	9958.00	9970.00	10020.00	10020.00
1.638	1481.42	.82	1482.13	61.53	95.28	1513.72	.00	.48	9958.47	9970.00	10020.00	10020.00
1.695	1482.64	.00	1482.83	287.20	390.57	700.47	517.95	-9830.00	9830.00	9978.00	10016.00	10362.00
1.695	1483.79	1.15	1484.09	104.88	182.96	994.38	431.67	.51	9955.68	9978.00	10016.00	10060.56
1.695	1483.62	.98	1483.88	122.00	224.29	914.73	469.98	122.00	9950.00	9978.00	10016.00	10072.00
1.695	1483.63	.99	1483.90	120.25	218.50	921.16	469.34	.44	9951.07	9978.00	10016.00	10071.31
1.761	1484.51	.00	1484.97	404.57	131.00	1061.18	416.82	.00	.00	9980.00	10017.00	.00
1.761	1485.44	.93	1486.26	50.47	.00	1488.03	120.97	.56	9980.00	9980.00	10017.00	10030.48
1.761	1485.23	.71	1486.01	61.00	.00	1418.08	190.91	61.00	9980.00	9980.00	10017.00	10041.00
1.761	1485.24	.73	1485.99	63.78	.00	1396.32	212.68	.49	9980.00	9980.00	10017.00	10043.78

1.120	1466.57	.00	1466.85	279.35	695.15	1339.67	269.18	.00	.00	9974.00	10037.00	.00
1.120	1467.63	1.06	1468.07	88.24	423.35	1880.65	.00	.43	9948.76	9974.00	10037.00	10037.00
1.120	1467.42	.85	1467.87	93.00	486.82	1817.18	.00	93.00	9944.00	9974.00	10037.00	10037.00
1.120	1467.43	.86	1467.88	92.35	478.23	1825.77	.00	.39	9944.65	9974.00	10037.00	10037.00
1.207	1469.05	.00	1469.46	235.41	947.92	1154.85	201.23	.00	.00	9997.00	10030.00	.00
1.207	1470.13	1.09	1470.74	88.73	817.91	1486.09	.00	.42	9941.27	9997.00	10030.00	10030.00
1.207	1470.02	.97	1470.59	96.00	867.28	1436.72	.00	96.00	9934.00	9997.00	10030.00	10030.00
1.207	1470.03	.98	1470.61	95.12	860.84	1443.16	.00	.39	9934.88	9997.00	10030.00	10030.00
1.288	1471.57	.00	1471.82	306.88	1112.20	894.42	297.38	.00	.00	9994.00	10032.00	.00
1.288	1472.68	1.11	1473.11	93.61	1089.94	1214.06	.00	.62	9938.39	9994.00	10032.00	10032.00
1.288	1472.52	.95	1472.90	103.00	1165.21	1138.79	.00	103.00	9929.00	9994.00	10032.00	10032.00
1.288	1472.53	.96	1472.91	103.08	1166.55	1137.45	.00	.54	9928.92	9994.00	10032.00	10032.00

1.856	1487.49	.00	1487.86	150.35	207.55	1200.50	200.95	.00	.00	9980.00	10019.00	.00
1.856	1488.66	1.16	1489.20	41.67	17.05	1589.28	2.67	.37	9978.00	9980.00	10019.00	10019.67
1.856	1488.46	.97	1488.95	50.00	67.82	1497.87	43.31	50.00	9974.00	9980.00	10019.00	10024.00
1.856	1488.43	.93	1488.93	49.07	58.54	1509.61	40.85	.31	9974.70	9980.00	10019.00	10023.77
1.951	1489.53	.00	1489.81	129.20	674.27	866.12	68.61	.00	.00	9981.00	10011.00	.00
1.951	1490.75	1.22	1491.11	60.04	520.42	1088.58	.00	.33	9950.97	9981.00	10011.00	10011.00
1.951	1490.49	.96	1490.83	66.00	583.09	1025.91	.00	66.00	9945.00	9981.00	10011.00	10011.00
1.951	1490.51	.98	1490.85	65.42	576.66	1032.34	.00	.28	9945.58	9981.00	10011.00	10011.00
2.045	1491.87	.00	1492.11	281.64	591.37	650.92	366.71	.00	.00	9988.00	10019.00	.00
2.045	1492.96	1.09	1493.36	99.21	482.07	930.82	196.12	.50	9946.30	9988.00	10019.00	10045.51
2.045	1492.73	.86	1493.10	111.00	519.26	875.17	214.56	111.00	9939.00	9988.00	10019.00	10050.00
2.045	1492.74	.87	1493.11	111.81	516.61	869.41	222.98	.43	9939.05	9988.00	10019.00	10050.87
2.121	1494.43	.00	1494.85	136.41	254.66	939.47	113.86	.00	.00	9980.00	10019.00	.00
2.121	1495.46	1.03	1496.11	39.00	.00	1308.00	.00	.40	9980.00	9980.00	10019.00	10019.00
2.121	1495.23	.80	1495.88	43.00	42.60	1265.40	.00	43.00	9976.00	9980.00	10019.00	10019.00
2.121	1495.21	.79	1495.88	42.54	36.48	1271.52	.00	.36	9976.46	9980.00	10019.00	10019.00

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
2.200	1496.00	.00	1496.06	336.41	728.24	579.76	.00	.00	.00	9959.00	10036.00	.00
2.200	1497.17	1.18	1497.26	170.91	455.63	852.37	.00	.44	9861.96	9959.00	10036.00	10036.00
2.200	1496.95	.95	1497.03	187.32	519.87	788.13	.00	191.00	9845.00	9959.00	10036.00	10036.00
2.200	1496.95	.95	1497.03	187.01	518.82	789.18	.00	.38	9845.32	9959.00	10036.00	10036.00

SUMMARY OF ERRORS AND SPECIAL NOTES

FLOODWAY DATA, BUCHANAN WASH
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.710	658.	4040.	.6	1461.4	1460.4	1.0
.782	558.	2642.	.9	1461.4	1460.4	1.0
.890	178.	519.	4.4	1461.4	1460.5	.9
.985	114.	479.	4.8	1464.3	1463.2	1.1
1.120	88.	438.	5.3	1467.7	1466.6	1.1
1.207	89.	389.	5.9	1470.1	1469.0	1.1
1.288	94.	445.	5.2	1472.7	1471.6	1.1
1.383	64.	345.	6.7	1475.4	1474.3	1.1
1.483	63.	350.	4.6	1478.5	1477.3	1.2
1.572	107.	427.	3.8	1480.1	1479.0	1.1
1.638	55.	233.	6.9	1481.5	1480.6	.9
1.695	105.	389.	4.1	1483.8	1482.6	1.2
1.761	50.	229.	7.0	1485.4	1484.5	.9
1.856	42.	277.	5.8	1488.7	1487.5	1.2
1.951	60.	341.	4.7	1490.7	1489.5	1.2
2.045	99.	340.	4.7	1493.0	1491.9	1.1
2.121	39.	201.	6.5	1495.4	1494.4	1.0
2.200	171.	567.	2.3	1497.2	1496.0	1.2

FLOODWAY DATA, BUCHANAN WASH
PROFILE NO. 3

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.710	658.	4041.	.6	1461.4	1460.4	1.0
.782	557.	2637.	.9	1461.4	1460.4	1.0
.890	178.	518.	4.4	1461.4	1460.5	.9
.985	124.	507.	4.5	1464.2	1463.2	1.0
1.120	93.	438.	5.3	1467.4	1466.6	.8
1.207	96.	401.	5.7	1470.0	1469.0	1.0
1.288	103.	469.	4.9	1472.5	1471.6	.9
1.383	69.	351.	6.6	1475.1	1474.3	.8
1.483	69.	358.	4.5	1478.3	1477.3	1.0
1.572	113.	430.	3.7	1479.9	1479.0	.9
1.638	62.	244.	6.6	1481.4	1480.6	.8
1.695	122.	418.	3.8	1483.6	1482.6	1.0
1.761	61.	239.	6.7	1485.2	1484.5	.7
1.856	50.	298.	5.4	1488.5	1487.5	1.0
1.951	66.	353.	4.6	1490.5	1489.5	1.0
2.045	111.	352.	4.6	1492.8	1491.9	.9
2.121	43.	205.	6.4	1495.2	1494.4	.8
2.200	187.	587.	2.2	1496.9	1496.0	.9

FLOODWAY DATA, BUCHANAN WASH
PROFILE NO. 4

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.710	658.	4040.	.6	1461.4	1460.4	1.0
.782	558.	2642.	.9	1461.4	1460.4	1.0
.890	178.	519.	4.4	1461.4	1460.5	.9
.985	123.	504.	4.6	1464.2	1463.2	1.0
1.120	92.	438.	5.3	1467.5	1466.6	.9
1.207	95.	399.	5.8	1470.0	1469.0	1.0
1.288	103.	471.	4.9	1472.6	1471.6	1.0
1.383	69.	350.	6.6	1475.1	1474.3	.8
1.483	69.	359.	4.5	1478.3	1477.3	1.0
1.572	114.	432.	3.7	1479.9	1479.0	.9
1.638	62.	243.	6.6	1481.4	1480.6	.8
1.695	120.	414.	3.9	1483.6	1482.6	1.0
1.761	64.	246.	6.5	1485.2	1484.5	.7
1.856	49.	293.	5.5	1488.4	1487.5	.9
1.951	65.	351.	4.6	1490.5	1489.5	1.0
2.045	112.	356.	4.5	1492.8	1491.9	.9
2.121	43.	203.	6.5	1495.2	1494.4	.8
2.200	187.	587.	2.2	1497.0	1496.0	1.0