REFERENCE 7

"*Technical Drainage Study for Summerlin Village 13 Town Center Drive Improvements*" Approved on August 17, 2000

00.21026

TECHNICAL DRAINAGE STUDY
FOR
SUMMERLIN VILLAGE 13
TOWN CENTER DRIVE IMPROVEMENTS

62013.218

July 2000

Prepared for:

Howard Hughes Properties, Inc.,
a Nevada Corporation
10000 West Charleston Boulevard, Suite 200
Las Vegas, NV 89135
Phone: (702) 791-4300
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G.C. WALLACE, INC.
Engineering/Architecture

Department of Public Works

500 S Grand Central Pky • PO Box 554000 • Las Vegas NV 89155-4000
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M.J. Manning, Director • E-Mail: mjm@co.clark.nv.us

August 17, 2000

G. C. Wallace, Inc.
1555 South Rainbow Boulevard
Las Vegas, Nevada 89146

Re: WILLDAN/Clark County Public Works Plan Review Contract
Technical Drainage Study for Town Center Drive Improvements, Village 13 **(3231)**
Study Dated: July 10, 2000
Addendum Dated: August 8, 2000
Location: Town Center Drive between Sahara Avenue and Charleston Avenue (Sec.1, T. 21 S., R. 59 E.)
HTE #00-21026

The referenced **Technical Drainage Study** has been reviewed and is accepted as complying with minimum improvement standards. As set forth in the subject drainage study, the following measures will be taken to mitigate flood hazards:

1. The site shall be graded with respect to drainage as shown on "Village 13, Town Center Drive Improvements," sheets 2, 3, 6-18, and 22-26, signed and sealed by Christopher W. Anderson, P.E. on August 9, 2000, and sheets 27-29, signed and sealed by Brian L. Schmidt, P.E. on August 9, 2000;

2. The following drainage facilities shall be constructed:

   a. Approximately, 125 lf of 60-inch RCP storm drain with a rip rap lined inlet junction structure located at Town Center Drive Station 405+84.19 and as shown in detail 2/26 with the following dimensions:

      D_{50} = 12 inches
      Thickness = 24 inches
      Sideslopes = 3H:1V

   b. Approximately, 608 lf of 78-inch RCP stormdrain with a Tee Type manhole connecting to a transition structure as shown on detail 1/28 located downstream of the facility of 2(c)

   c. An 8.5-foot-wide Modified Type C drop inlet connected to approximately, 73 lf of 24-inch RCP lateral connecting to the facility in 2(b)

d. Approximately, 357 lf of 48-inch RCP stormdrain with an orifice plate per detail 1/18, at the upstream end, connecting to the existing detention basin outfall structure as shown in detail 1/24 located downstream of the facility in 2(a)

e. Approximately, 78 lf of 60-inch RCP stormdrain lateral connecting to a Type II manhole at Town Center Drive station 412+49.4

f. An 8.5-foot-wide Modified Type C drop inlet connected to approximately 70 lf of 24-inch RCP lateral connected to the manhole in 2(e)

g. Approximately, 677 lf of 60-inch RCP storm drain with 2 Type III manholes located downstream of the manhole in 2(e) and connecting to the junction structure in 2(a)

h. An 11.5-foot-wide Modified Type C drop inlet connected to 33 lf of 24-inch RCP lateral connected to the facility in 2(g) located at Town Center Drive station 406+53.67

i. Approximately, 103 lf of 48-inch RCP stormdrain with a Type II manhole and a rip rap lined inlet per detail 6/25 located at Town Center Drive station 399+07.45 with the following dimensions:

D_{50} = 12 inches
Thickness = 24 inches
Sideslopes = 3H:1V

j. An 11.5-foot-wide Modified Type C drop inlet connected to approximately, 114 lf of 24-inch RCP lateral connected to the manhole in 2(i)

k. Approximately, 686 lf of 48-inch RCP stormdrain with 3, Type III manholes connected to the junction structure in 2(a)

l. A 4-foot-wide Type A drop inlet connected to approximately 34 lf of 24-inch RCP lateral connected to the manhole at Town Center Drive station 405+84.19 in 2(k)

m. Approximately, 71 lf of 72-inch RCP connected to a shaft manhole at Town Center Drive station 384+53.39

n. Approximately, 271 lf of an 8-foot by 6-foot RCB with a shaft manhole located at the existing, double barrel 8-foot-by 6-foot RCB at Town Center Drive station 387+55.00

o. Approximately, 75 lf of double barrel 8-foot by 6-foot RCB with a rip rap lined inlet located upstream of the facility in 2(n) and with the following dimensions:

D_{50} = 12 inches
Thickness = 24 inches
Sideslopes = 3H:1V

p. Two, 8.5-foot-wide Modified Type C drop inlets connected to approximately, 132 lf of 24-inch RCP laterals connected to a Type I manhole at Town Center Drive station 374+50.00

q. Approximately, 51 lf of 24-inch RCP storm drain connected to an existing manhole located downstream of the facility in 2(p)

r. Two, 8.5-foot-wide Modified Type C drop inlets connected to approximately, 130 lf of 24-inch RCP laterals connected to a Type II manhole at Town Center Drive station 366+38.00

s. Approximately, 820-foot-long earthen v-ditch located south of Marketwalk Place and west of Town Center Drive with the following dimensions:

Depth = 3 foot (minimum)
Sideslopes = 3H:1V

t. The existing grate at the detention basin outfall structure shall be modified to be 2 feet by 2 feet as shown in detail 1/24

3. A bond estimate must be submitted to Clark County Public Works for the above-mentioned stormwater management facilities;

4. The subject site is located within Zone X, as shown on FIRM Community Panel Number 32003C2150D, revised August 16, 1995, and later revised to reflect LOMR dated January 14, 1997. Zone X is determined to be outside the 500-year flood plain;

5. Mylars of the grading plan must be submitted to the Clark County Plan Check for approval signatures prior to permit issuance;

6. Right-of-way dedication must be verified;

7. At the request of Clark County Public Works, drainage/grading plans for the proposed development have been reviewed for compliance to the requirements set

forth in the "Minimum Drainage Study Criteria Checklist," "Drainage Plan Information," dated July 15, 1997. **As a condition of final approval, the drainage/grading plans submitted for this project require the following modifications to meet the minimum standards outlined in the above-referenced regulation:**

a. Label the 24 inch invert notation as future on sheet 18

b. Remove the word "Plans" on sheets 27, 28 and 29 in the title block

No liability is assumed by the County for information, data, and conclusions of the consulting engineer.

M.J. MANNING
DIRECTOR OF PUBLIC WORKS

BY: _____
MARC A. BOLDUC, P.E.
SENIOR ENGINEER, MAJOR PROJECTS

MAB/GH/bs/tg

Cc: Howard Hughes Corporation
Development File

C:\MyFiles\drainage\summerlin\village13\0021026app.wpd

G. C. WALLACE, INC.
Engineers / Planners / Surveyors

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AFFILIATE OFFICE IN
SACRAMENTO, CA

62013.218

August 8, 2000

Marc Bolduc, P.E.
Major Projects Team
Clark County Department of Public Works
Community Development Division
500 South Grand Central Parkway
Las Vegas, NV 9155-4000

Subject: Technical Drainage Study for Summerlin
Village 13 Town Center Drive Improvements
H.T.E. #00-21026

Dear Mr. Bolduc:

The purpose of this letter is to serve as an addendum and to respond to comments received on the subject drainage study. Comments were received in a memorandum from Willdan, dated July 19, 2000. The comments will be addressed in the order of their appearance in the memorandum as follows:

Comment: "1. Plans for the proposed design alterations to the Detention Basin for Village 13 East were not included and must be submitted;"

Response: Per the additional comment (dated July 20, 2000), this comment refers to the grated inlet which serves as an outlet for the detention basin. Currently, the grated inlet is constructed as a 2-foot by 10-foot grate. The drawings have been modified to include the reduction of the area of the grated inlet to a 2-foot by 2-foot opening which is consistent with the hydraulic calculations for ultimate conditions for the detention basin.

Comment: "2. The study must provide the reference HEC-1 model input for the Basin A hydrologic analysis in order to review the referenced basins and flow split information;"

Response: The ultimate model combines the approved hydrology for Village 13 East Phase 1 Improvements with the upstream hydrology recently approved with the Village 13 Parcel X Improvements. The approved hydrology for the Parcel X Improvements was slightly modified; some subbasins were combined. All modified subbasins were updated in the Standard Form 4, included in Appendix A of the drainage study. A copy of the approved Standard Form 4 for the Parcel X Improvements was included in Appendix C of the drainage study.

TECHNICAL DRAINAGE STUDY
FOR
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July 2000

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related to time of concentration (Tc) by the following relationship: Tl=0.6 (Tc). The time of concentration is defined as the time required for runoff to flow from the most remote areas of the basin to the outlet of the basin or a design point. The procedure for calculating Tc is outlined in Section 602 of the Manual. Lag time calculations for this site were derived in the *Summerlin Village 13 East Conceptual Drainage Study*. For interim subbasins and subbasins with modified curve numbers, Standard Form 4 is included in Appendix A.

VI. EXISTING CONDITIONS

Existing conditions for the upstream watershed are shown on Figure 5. A HEC-1 model addressing existing conditions is included in Appendix A. The proposed project does not alter general existing drainage patterns. The proposed drainage patterns for the development are consistent with the conceptual analysis approved in the master drainage study.

Under existing conditions, partial half-street improvements for the east side of Town Center Drive have been constructed. Storm flows currently cross Town Center Drive at three points: a double 7-foot wide by 4-foot high RCB culvert (Point 2), a double 8-foot wide by 6-foot high RCB culvert (Point 3), and a 54-inch RCP storm drain (Point 4) at the intersection of Town Center Drive and La Madre Mountain Drive (see Figure 5). The flows from the double 7-foot wide by 4-foot high RCB culvert (Point 2) continue east to the Village 13 East Detention Basin. The double 8-foot wide by 6-foot high RCB (Point 3) drains into an incised wash which has been incorporated into the development plan for Village 13 East Phase 2 as Paseo Parcels P2 and P1. The 54-inch RCP storm drain (Point 4) accepts the 100-year existing offsite flows into the storm drain system in Town Center Drive and La Madre Mountain Drive.

The full-street improvements for Charleston Boulevard and Sahara Avenue are in place. Pavilion Center Drive is rough graded from Charleston Boulevard to Sahara Avenue. The Western Beltway is graded across the entire length of Village 13 and cuts off flows generated west of the Beltway. However, an opening is left in the Beltway grading approximately 2,000 feet south of Charleston Boulevard, at Park Centre Drive, which allows the crossing of storm runoff.

In addition to the existing facilities listed above, the assumption is made that the street improvements for Griffith Peak Drive and for Pavilion Center Drive between Charleston Boulevard and Griffith Peak Drive are constructed prior to or concurrently with this project. The technical information for these improvements was approved in the *Drainage Study for Summerlin Village 13 Parcel X Improvements* (Reference 8).

VII. ULTIMATE DRAINAGE PATTERNS

The ultimate drainage patterns for the project area have been perpetuated from the *Conceptual Drainage Study for Summerlin Village 13 East* (Reference 5) in the subsequent drainage studies for the construction of the street improvements for Phases 1 and 2 in Summerlin Village 13 East (References 6 and 7). For reference, relevant portions of the referenced studies are included in Appendix C. The drainage patterns for Town Center Drive agree with the design recommended in the conceptual drainage study.

Figure 6 shows the developed watersheds used for the design of the storm drain facilities in Town Center Drive, the 78-inch RCP storm drain to the detention basin, and 48-inch storm drain under the detention basin. The watershed including the project area was originally divided into two HEC-1 models: Drainage Area A which drains to the Faith Lutheran High School (Point A) and Drainage Area B which drains via a large natural wash to a 5-barrel 5-foot wide by 4-foot high RCB culvert under Hualapai Way (Point B). The HEC-1 models were updated to include revised curve number methodology for multi-family residential parcels (Subbasins A7, A8, A14, A15, A16, A18, A22, B23, B24) consistent with the 1999 Manual criteria. In addition, the subbasins for Town Center Drive were refined as needed to match the proposed improvements. The updated HEC-1 models for Drainage Areas A and B are included in Appendix A. Table 1 summarizes the results of the hydrologic analyses.

TABLE 1a - SUMMARY OF REFINED HEC-1 MODEL

DRAINAGE AREA A

Subbasin/ Combination Point*	Q_{10} (cfs)	Q_{100} (cfs)	Subbasin/ Combination Point*	Q_{10} (cfs)	Q_{100} (cfs)
A1	62	118	A21B	5	10
A2A	3	7	CA4S	80	160
A2B	5	9	CA4	267	514
CA1	88	130	A22	22	42
X	47	89	A23	8	15
A7	17	32	A21AE	3	7
A8	17	34	A36	2	3
A9	11	21	A24	1	3
CA2	156	299	A25A	4	13
CH1	3	6	CA5	302	584
A10AW	2	5	DET	183	231
A10B	4	8	A10AE	3	5
CA4N	161	310	A30A	2	4
A5	24	46	A30B	2	4
A6	3	5	A28-9	30	57
A13	3	5	A25B	3	6
CA4C	29	55	A31	2	4
A11	7	15	A27	3	7
A14	15	29	A26	21	47
A15	18	35	CA6	281	299
A16	10	19	A32	3	5
A17	1	2	CH2	6	10
A18	14	27	A33	2	5
A19	10	23	CA7	28	54
CA3	69	142	PT.A	244	349
A20	3	6	A34	8	16
A21AW	3	6	A35	10	17

*See Figure 6

TABLE 1b - SUMMARY OF REFINED HEC-1 MODEL DRAINAGE AREA B					
Subbasin/ Combination Point*	Q_{10} (cfs)	Q_{100} (cfs)	Subbasin/ Combination Point*	Q_{10} (cfs)	Q_{100} (cfs)
B1	66	128	CB8	315	466
B2	3	5	B25	8	23
B3	2	5	B34A	4	7
CB1	70	135	B26	5	10
B4	4	8	CB9S	9	18
B5	33	68	CB9	325	489
CB2	102	203	B28	3	7
B6	5	10	CB10W	324	490
B7	5	10	B30	31	58
B8	3	7	B31	4	9
CB3	109	219	B32	33	64
B11	61	116	B33	7	14
B12	8	22	B34B	6	11
D.IN	172	345	CB11	79	151
D.OUT	154	177	SA1 (divert flow to Sahara Ave)	27	53
B9	5	9	CB11E (total flow east of TCD)	52	98
B10	4	8	B35	17	35
CB4	163	182	B36	3	7
B13A	9	15	CB12	69	133
B13B	5	9	B37	19	41
B14	3	6	B38	4	7
B15	6	10	CB13	87	176
B16	5	9	B39	13	28
CB5	189	222	B40	4	7
B17	7	13	CB10S (total flow in storm drain)	98	198
B18A	44	85	B27	22	50
CB6	237	315	B29	4	8
B18B	43	81	CB10	445	730
B19	7	17	B42	1	4
CB7	285	406	CB15	442	729
B20	8	15	B43	4	7
B20I	1	2			
B21	13	25	B44	14	30
B22A	2	5	B45	13	28
B23	9	18	H3	11	19
B22B	1	2	PT.BN	40	82
B24	9	18	PT.B	476	795

*See Figure 6

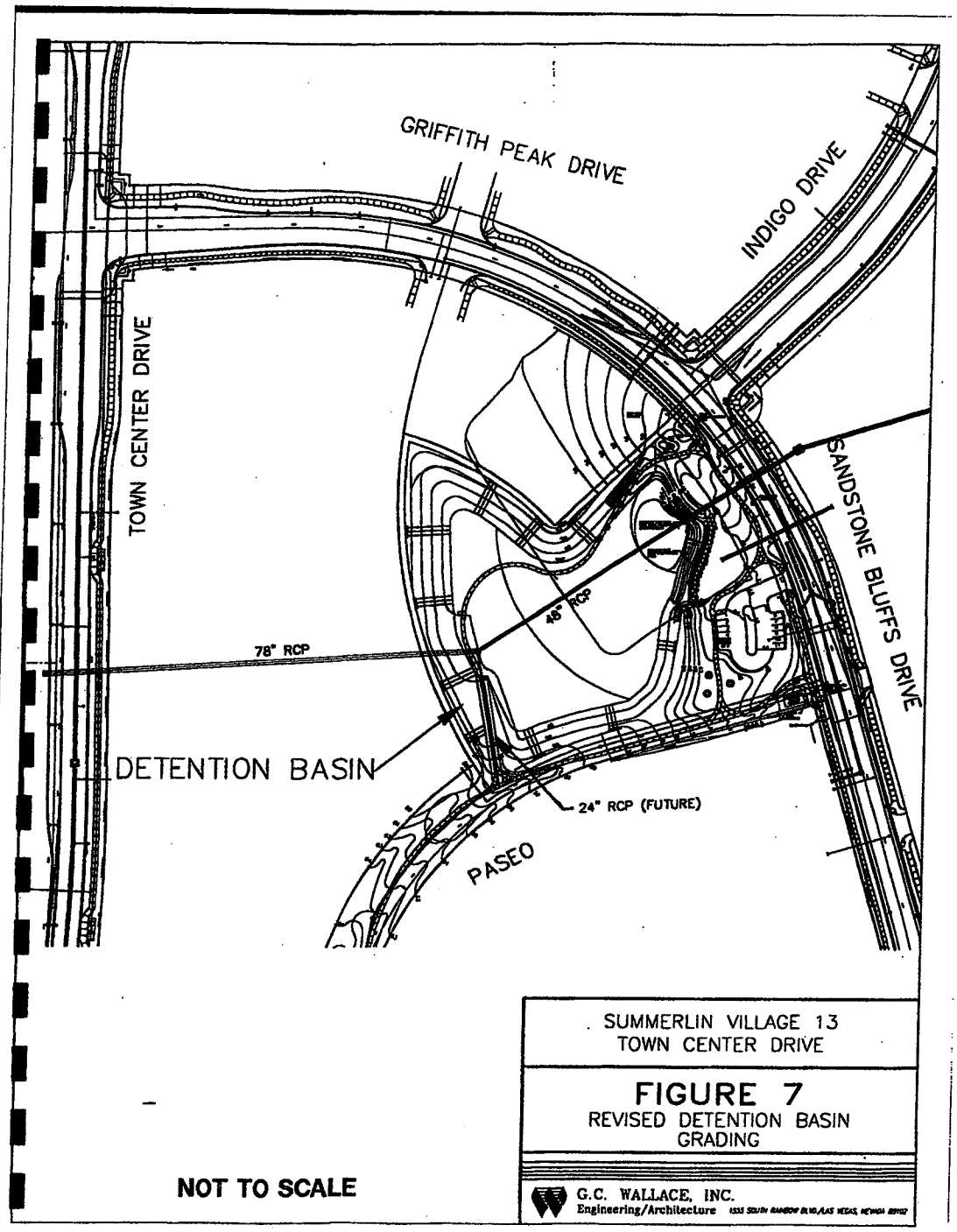
The proposed detention basin layout is shown on Figure 7. The locations of the 48-inch RCP bypass storm drain and 45-inch orifice plate are included in this design package.

The amount of bypass (or outflow) at each elevation in the detention basin was adjusted to model the actual vertical design locations. Along with the proposed improvements for the Detention Basin in Summerlin Village 13 East, minor alterations to the HEC-1 model were made which eliminates the excess volume for the detention basin. Primarily, anticipated future modifications to the detention basin consist of milder slopes on the sides of the detention basin which would reduce the excess storage volume.

When Villages 13 and 19 are fully developed, the peak stage is at the spillway elevation of 2946.1 feet. In a 100-year storm event, runoff will not top the spillway. With the proposed improvements for the detention basin, the interim condition described in the *Drainage Study for Summerlin Village 13 East Phase 1 Improvements* (Reference 6) will be eliminated. The detention basin will operate as designed for the ultimate condition, as an offline facility; storm flows will back into the detention basin when capacity of the 45-inch orifice/48-inch bypass is exceeded.

The spillway design is unchanged. The spillway was designed using a PMF event based on the interim condition, where storm flows enter the detention basin directly as surface flow. With the proposed improvements for the detention basin, the detention basin will operate as an offline facility. Therefore, the current spillway design is conservative.

The peak outflow from the revised detention basin is 231 cfs during a 100-year storm event. This outflow is combined with runoff collected by storm drain in Sandstone Bluffs Drive downstream of the detention basin. The combined 100-year discharge to the Faith Lutheran School site is 299 cfs (HEC-1 Combination Point CA6). As established in the conceptual drainage study, the maximum allowable 100-year discharge in the outflow storm drain (existing 5-foot wide by 4-foot high RCB) is 311 cfs. Therefore, the proposed detention basin configuration will not negatively impact downstream facilities. The proposed storm drain facilities are shown on Figure 8. The proposed storm drain facilities were designed and modeled using the combined peak flows from the revised HEC-1 analyses. Hydraulic calculations were performed using WSPG. Hydraulic calculations are located in Appendix B. The hydraulic grade line is marked on the pipe profiles in the accompanying drawings.



SUMMERLIN VILLAGE 13
TOWN CENTER DRIVE

FIGURE 7

REVISED DETENTION BASIN GRADING

G.C. WALLACE, INC.
Engineering/Architecture

APPENDIX C
Supporting Documents and Reference Material

Drainage Study for
Summerlin Village 13 East Phase 1
Drainage Study for
Summerlin Village 13 East Phase 2
Drainage Study for
Summerlin Village 13 Parcel X Improvements

HEC-1 Model

Drainage Area A
Modified Detention Basin

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL

TIME OF CONCENTRATION

File: future-tcd.wb3
Project No: 62013.218

Summerlin Village 13
Town Center Drive
Proposed Hydrology

Calculated by: AT
Date: 21-Jun-00

SUB-BASIN DATA						INITIAL / OVERLAND TIME (Ti)			TRAVEL TIME (Tt)					Tc CHECK URBANIZED BASINS		Tc	Tlag	REMARKS
DESIG: (1)	DEV./EX. (D or E)	CN	K (2)	AREA Ac (3)	AREA Mi^2	INITIAL LENGTH Feet (4)	SLOPE % (5)	Ti Min (6)	TRAVEL LENGTH Feet (7)	SLOPE % (8)	V1 VELOCITY FPS (9a)	V2 VELOCITY FPS (9b)	Tt Min (10)	TOTAL LENGTH Ft (11)	Tc = (L/180)+10 Min (12)	Min (13)	Tlag= 0.6Tc/60 Hours	Remarks:
A5	D	95	0.8640	13.0	0.02038	100	1.0	4.2	900	1.9	2.8	4.2	4.6	1000	15.6	8.8	0.088	3.15/1.80
A7	D	95	0.8640	10.0	0.01563	100	1.0	4.2	1200	1.2	2.2	3.4	7.2	1300	17.2	11.5	0.115	3.15/1.80
A8	D	95	0.8640	10.4	0.01625	100	1.0	4.2	1000	1.0	2.0	3.1	6.8	1100	16.1	11.1	0.111	3.15/1.80
A9	D	95	0.8640	6.1	0.00952	24	2.0	1.7	2100	2.5	3.2	4.8	8.1	2124	21.8	9.8	0.098	3.15/1.80
A10AW	D	95	0.8640	1.4	0.00222	48	2.0	2.3	650	0.4	1.3	1.9	7.8	698	13.9	10.2	0.102	3.15/1.80
A10AE	D	95	0.8640	1.5	0.00228	48	2.0	2.3	650	0.4	1.3	1.9	7.8	698	13.9	10.2	0.102	3.15/1.80
A10B	D	95	0.8640	2.5	0.00383	48	2.0	2.3	670	0.4	1.3	1.9	8.0	718	14.0	10.3	0.103	3.15/1.80
A14	D	95	0.8640	9.0	0.01406	100	1.0	4.2	1200	1.3	2.3	3.5	7.0	1300	17.2	11.2	0.112	3.15/1.80
A15	D	95	0.8640	10.6	0.01656	100	1.0	4.2	1200	1.5	2.5	3.7	6.5	1300	17.2	10.7	0.107	3.15/1.80
A16	D	95	0.8640	5.4	0.00844	100	1.0	4.2	900	1.6	2.6	3.9	5.0	1000	15.6	9.2	0.092	3.15/1.80
A18	D	95	0.8640	7.6	0.01188	100	1.0	4.2	350	0.5	1.4	2.2	4.1	450	12.5	8.3	0.083	3.15/1.80
A21AW	D	95	0.8640	2.0	0.00313	48	2.0	2.3	1150	0.6	1.6	2.4	9.9	1198	16.7	12.2	0.122	3.15/1.80
A21AE	D	95	0.8640	2.1	0.00328	48	2.0	2.3	1150	0.6	1.6	2.4	9.9	1198	16.7	12.2	0.122	3.15/1.80
A21B	D	95	0.8640	2.8	0.00441	48	2.0	2.3	770	0.6	1.6	2.4	7.2	818	14.5	9.8	0.098	3.15/1.80
A22	D	95	0.8640	12.5	0.01953	100	1.0	4.2	1050	1.7	2.6	4.0	5.5	1150	16.4	9.7	0.097	3.15/1.80
A2A	D	95	0.8640	1.7	0.00272	24	2.0	1.7	500	0.7	1.7	2.6	4.9	524	12.9	8.6	0.086	3.15/1.80
A2B	D	95	0.8640	2.6	0.00398	24	2.0	1.7	730	0.5	1.4	2.2	7.6	754	14.2	9.3	0.093	3.15/1.80
X	D	95	0.8640	28.6	0.04472	100	1.0	4.2	2500	2.2	3.0	4.5	10.1	2600	24.4	14.4	0.144	3.15/1.80

Tc = Ti + Tt Tlag = 0.6 Tc
Ti = 1.8 (1.1 - K) L^1/2 / S^1/3
K = 0.0132 (CN) - 0.39

For the travel time (Ti) calculations,
V1 applies to the first 500 feet of travel distance;
V2 applies to the remaining travel distance.

Existing V1 = 14.8*(S/100)^1/2 Developed V1 = 20.2*(S/100)^1/2
Existing V2 = 29.4*(S/100)^1/2 Developed V2 = 30.6*(S/100)^1/2

REFERENCE :

STANDARD FORM 4

```
*************************************
*                                   *
*  FLOOD HYDROGRAPH PACKAGE (HEC-1) *
*            JUN  1998              *
*          VERSION 4.1              *
*                                   *
* RUN DATE  22JUN00  TIME 13:11:10  *
*                                   *
*************************************
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*************************************
*                                   *
*  U.S. ARMY CORPS OF ENGINEERS     *
*  HYDROLOGIC ENGINEERING CENTER    *
*       609 SECOND STREET           *
*     DAVIS, CALIFORNIA 95616       *
*         (916) 756-1104            *
*                                   *
*************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X       XX
X     X  X        X             X
XXXXXXX  XXXX     X       XXXXX X
X     X  X        X             X
X     X  X        X     X       X
X     X  XXXXXXX  XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 26 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


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

              *DIAGRAM
   1          ID  ************************************************************
   2          ID  * ......................................................... *
   3          ID  * :          SUMMERLIN VILLAGE 13                       : *
   4          ID  * :          TOWN CENTER DRIVE                          : *
   5          ID  * :          PROPOSED CONDITIONS                        : *
   6          ID  * :.....................................................: *
   7          ID  * :          RETURN PERIOD _ _ _ 10-YEAR/100-YEAR       : *
   8          ID  * :          DISTRIBUTION_ _ _ _ 6-HOUR SDM3            : *
   9          ID  * :          PROJECT NO_ _ _ _ _ 62013.218              : *
  10          ID  * :          FILENAME_ _ _ _ _ _ V13TCD.H1              : *
  11          ID  * :          REV. DATE _ _ _ _ _ 06/21/99               : *
  12          ID  * :          MODELED BY_ _ _ _ _ AT                     : *
  13          ID  * :.....................................................: *
  14          ID  ************************************************************
  15          IT      5       0       0     300
  16          ID      5       0
  17          IN      5       0       0
  18          JR    PREC     .57     .99    1.0

  19          KK      A1
  20          KM    RESORT/OFFICE SWING SITE
  21          BA   .06031
  22          PB    3.15
  23          PC   0.000   .0200   .0570   .0700   .0870   .1080   .1240   .1300   .1300   .1300
  24          PC   .1300   .1300   .1300   .1330   .1400   .1420   .1480   .1580   .1720   .1830
  25          PC   .1900   .1970   .1990   .2000   .2010   .2040   .2140   .2290   .2410   .2490
  26          PC   .2510   .2560   .2700   .2780   .2810   .2830   .2950   .3220   .3520   .4090
  27          PC   .4990   .5900   .7100   .7440   .7810   .8120   .8190   .8350   .8510   .8560
  28          PC   .8600   .8680   .8760   .8880   .9100   .9260   .9370   .9500   .9700   .9760
  29          PC   .9820   .9850   .9870   .9890   .9900   .9930   .9930   .9940   .9950   .9980
  30          PC   .9980   .9990  1.000
  31          LS      0      95
  32          UD    .159

  33          KK     A2A
  34          KM   PAVILION CENTER DRIVE
  35          BA  .00272
  36          LS      0      95
  37          UD    .066

  38          KK     A2B
  39          KM   PAVILION CENTER DRIVE
  40          BA  .00398
  41          LS      0      95
  42          UD    .093

  43          KK     CA1
  44          KM   COMBINE A1, A2A, AND A2B AT CA1
  45          KC      3
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LINE      ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  46      KK   R/CA1
  47      KM   ROUTE FLOWS TO CA2
  48      RD    2200     .02    .013          CIRC    4.5

  49      KK      X
  50      KM   PARCEL X
  51      BA  .04472
  52      LS       0      95
  53      UD    .144

  54      KK      A7
  55      KM      HR
  56      BA  .01563
  57      LS       0      95
  58      UD    .115

  59      KK    R/A7
  60      KM   ROUTE FLOWS TO CA2
  61      RD     830     .02    .013          CIRC    4.5

  62      KK      A8
  63      KM      HR
  64      BA  .01625
  65      LS       0      95
  66      UD    .131

  67      KK      A9
  68      KM   GRIFFITH PEAK DRIVE
  69      BA  .00952
  70      LS       0      95
  71      UD    .098

  72      KK    CA2
  73      KM   COMBINE CA1, X, A7, A8 AND A9
  74      HC       5

  75      KK   R/CA2
  76      KM   ROUTE FLOWS TO CA4
  77      RD     650    .004    .013          CIRC      5

  78      KK    CH1
  79      KM   CHARLESTON BLVD
  80      BA   .0024
  81      LS       0      96
  82      UD    .051

  83      KK   A10AW
  84      KM   TOWN CENTER DRIVE
  85      BA  .00222
  86      LS       0      95
  87      UD    .102
1                                        HEC-1 INPUT                                    PAGE  3
LINE      ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  88      KK     COM
  89      HC       2

  90      KK    A10B
  91      KM   TOWN CENTER DRIVE
  92      BA  .00383
  93      LS       0      95
  94      UD    .103

  95      KK    CA4N
  96      KM   COMBINE CA2, CH1, A10AW, AND A10B AT CA4
  97      HC       3

  98      KK      A5
  99      KM   OFFICE
 100      BA  .02038
 101      LS       0      95
 102      UD    .088

 103      KK      A6
 104      KM   STREET
 105      BA  .00236
 106      LS       0      94
 107      UD    .097

 108      KK      A13
 109      KM   STREET
 110      BA  .00234
 111      LS       0      94
 112      UD    .097
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 113          KK   CA4C
 114          KM   COMBINE A5, A6, AND A13 IN STORM DRAIN
 115          HC     3

 116          KK   R/CA4C
 117          KM   ROUTE FLOWS TO CA4   CENTER
 118          RD    1700     .02    .013          CIRC     2.5

 119          KK   COM
 120          KM   COMBINE CA4N WITH A5, A6, AND A13 AT CA4
 121          HC     2

 122          KK    A11
 123          KM   CENTRAL PARK
 124          BA  .00926
 125          LS     0      88
 126          UD    .109
                                        HEC-1 INPUT                                    PAGE  4
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

 127          KK   R/A11
 128          KM   ROUTE FLOWS TO CA3
 129          RD    1800    .021    .016          TRAP      0      50

 130          KK    A14
 131          KM     HR
 132          BA  .01406
 133          LS     0      95
 134          UD    .112

 135          KK   R/A14
 136          KM   ROUTE FLOWS TO CA3
 137          RD     800     .02    .013          CIRC     2.5

 138          KK    A15
 139          KM     HR
 140          BA  .01656
 141          LS     0      95
 142          UD    .107

 143          KK    COM
 144          KM   COMBINE FLOW TO REDUCE THE NUMBER OF HYDROGRAPHS
 145          KM   A11,  A14, A15
 146          HC     3

 147          KK    A16
 148          KM     HR
 149          BA  .00844
 150          LS     0      95
 151          UD    .092

 152          KK   R/A16
 153          KM   ROUTE FLOWS TO CA3
 154          RD     800     .02    .013          CIRC     2.5

 155          KK    A17
 156          KM   STREET
 157          BA  .00094
 158          LS     0      96
 159          UD    .056

 160          KK   R/A17
 161          KM   ROUTE FLOWS TO CA3
 162          RD     800    .021    .016          TRAP      0      50

 163          KK    A18
 164          KM     HR
 165          BA  .01188
 166          LS     0      95
 167          UD    .083
                                        HEC-1 INPUT                                    PAGE  5
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

 168          KK    A19
 169          KM   STREET
 170          BA  .01313
 171          LS     0      89
 172          UD    .117

 173          KK    CA3
 174          KM   COMBINE A11, A12, A13, A14, A15, A16, A17, A18, AND A19 AT CA3
 175          HC     5

 176          KK   R/CA3
 177          KM   ROUTE FLOWS TO CA4
 178          RD     800     .02    .013          CIRC     4
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248          KK     CA5
249          KM   COMBINE CA4, A22, A23+, AND A25A AT CA5
250          HC      4
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LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

251          KK     DET
252          KM   PROPOSED DETENTION
253          KO       1
254          RS       1    STOR      -1
255          SV       0    0.59    1.30    2.20    4.07    6.04    8.13   10.34   10.57   12.67
256          SV   15.10
257          SE    39.5      41    41.5      42      43      44      45      46    46.1      47
258          SE      48
259          SQ     128     165     173     181     194     207     219     230     231     497
260          SQ    1139
             * ***************************************************************************
             * FLOWS DOWNSTREAM OF DETENTION BASIN
             *'***************************************************************************

261          KK   A10AE
262          KM   TOWN CENTER DRIVE (EAST SIDE)BETWEEN CHARLESTON AND GRIFFITH PEAK
263          BA  .00228
264          LS       0      95
265          UD    .102

266          KK   RA10AE
267          KM    ROUTE IN NORTH HALF OF GRIFFITH PEAK DRIVE TO DI AT INDIGO/GRIFFITH
268          KM    PEAK DRIVE INTERSECTION
269          RD     900     .03    .016            TRAP      23       3

270          KK    A30A
271          KM   GRIFFITH PEAK DRIVE NORTH OF SUBBASIN A22 BETWEEN SUBBASIN A25B
272          KM   AND TOWN CENTER DRIVE
273          BA   .0016
274          LS       0      93
275          UD    .051

276          KK    A30B
277          KM   GRIFFITH PEAK DRIVE BETWEEN INDIGO AND SUBBASIN A30A
278          BA  .00161
279          LS       0      93
280          UD    .036

281          KK   COM30
282          HC       2

283          KK     DIV
284          KM   DIVERT SOUTH HALF OF GRIFFITH PEAK DRIVE SOUTH TO SUMP AREA IN GRIFFITH PEAK
285          DT    A30S
286          DI       0       5      10      50
287          DQ       0     2.5       5      10

288          KK   COMDI
289          KM   COMBINE FLOW ON NORTH HALF WITH A10AE AT DI AT INDIGO/GRIFFITH PEAK INT
290          HC       2
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1


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

291          KK      DI
292          KM   DIVERT 2 CFS TO INDIGO DRIVE FROM DI BYPASS REMAINING FLOW ROUTED IN SD
293          DT    DIND
294          DI       0       5       7       8
295          DQ       0       0       2       2

296          KK   A28-9
297          KM   REVISED ON 9/15/99 BY CE COMBINED SUBBASINS A28/A29 INTO ONE PARCEL
298          KM   CN REVISED FROM NR TO PUBLIC FACILITY
299          BA  .02844
300          LS       0      95
301          UD   0.133

302          KK     D24
303          KM   DIVERT 32 CFS OF PARCEL FLOW TO EXISTING 36-INCH RCP AT INDIGO DRIVE
304          KM   REMAINING FLOW ROUTED TO 24-INCH RCP IN GRIFFITH PEAK DRIVE
305          DT     D36
306          DI       0      10      50     100    1000
307          DQ       0       5      32      32      32

308          KK    COM3
309          KM   COMBINE A28-9 (D24)WITH NORTH HALF OF GRIFFITH PEAK DRIVE IN SD
310          HC       2

311          KK    A25B
312          KM      DC
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 313          BA  .00250
 314          LS     0      95
 315          UD    .064

 316          KK    COM2
 317          KM   COMBINE A25S AND 24-INCH FROM A28-9
 318          HC      2

 319          KK    R/SD
 320          KM   ROUTE COMBINED FLOW THROUGH 24-IN RCP TO EXISTING 5X4 RCB AT CA6
 321          RD     250    .057    .013            CIRC       2

 322          KK   RA30S
 323          KM   RECALL SOUTH HALF OF GRIFFITH PEAK DRIVE
 324          DR    A30S

 325          KK     A31
 326          KM   GRIFFITH PEAK DRIVE SURFACE FLOW TO SUMP AT CA6
 327          BA  .00141
 328          LS     0      93
 329          UD    .039

 330          KK     A27
 331          KM   GRIFFITH PEAK DRIVE SURFACE FLOW FROM SOUTH OF SUMP
 332          BA  .00344
 333          LS     0      93
 334          UD    .131
1                                        HEC-1 INPUT                                                PAGE  9

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

 335          KK    CA6S
 336          KM   COMBINE SURFACE FLOW AT SUMP
 337          HC      3

 338          KK     A26
 339          KM     LR
 340          BA  .02688
 341          LS     0      90
 342          UD    .145

 343          KK     RSD
 344          KM   ROUTE THROUGH 30INCH SD TO SUMP AT INLETS
 345          RD     340    .019    .013            CIRC     2.5

 346          KK   CA6SP
 347          KM   COMBINE SOUTH PIPE FLOW
 348          HC      2
              * ********************
              * ROUTE REMOVED SINCE TOO SHORT OF DISTANCE
              *
              *   K  RSD2
              *   KM  ROUTE TO EXISTING 5X4 RCB THOUGH EXISTING 36INCH RCP
              *   RD   100   .0125    .013            CIRC       3
              * ************************************************************

 349          KK     CA6
 350          KM   COMBINE ALL FLOW AT EXISTING 5X4 RCB
 351          HC      3

 352          KK   RDIND
 353          KM   RECALL 2 CFS FROM INTERSECTION OF INDIGO DRIVE AND GRIFFITH PEAK DRIVE
 354          DR    DIND

 355          KK     A32
 356          KM   STREET
 357          BA  .00188
 358          LS     0      95
 359          UD    .047

 360          KK     CH2
 361          KM   CHARLESTON BOULEVARD
 362          BA  .0044
 363          LS     0      96
 364          UD    .074

 365          KK     A33
 366          KM   STREET
 367          BA  .00203
 368          LS     0      95
 369          UD    .078
1                                        HEC-1 INPUT                                                PAGE 10

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

 370          KK    CA7S
 371          KM   COMBINE SURFACE FLOW AT CA7
 372          HC      4
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373          KK    RD36
374          KM   RECALL 32 CFS OF PARCEL A28-9 FOR EXISTING 36IN STORM DRAIN
375          DR     D36

376          KK     CA7
377          KM   COMBINE PIPE FLOW AT CA7
378          HC       2

379          KK    PT.A
380          KM   TOTAL FLOW TO FAITH LUTHERAN HIGH SCHOOL SITE
381          HC       2
             * ************************************************************************

382          KK     A34
383          KM   AUTO CENTER
384          BA  .00736
385          LS       0      95
386          UD    .104

387          KK     A35
388          KM   SCHOOL EXPANSION
389          KM   NOT ENOUGH INFORMATION TO DETERMINE CN
390          KM   ASSUMED IMPERVIOUS SURFACE FOR A CONSERVATIVE CN=98
391          BA  .00734
392          LS       0      98
393          UD    .092

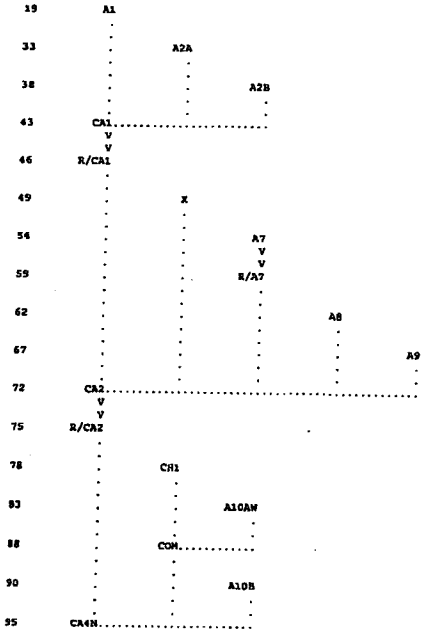
394          KK     B43
395          KM   HOMESTRETCH
396          BA  .00266
397          LS       0      95
398          UD    .049
399          ZZ
1
```

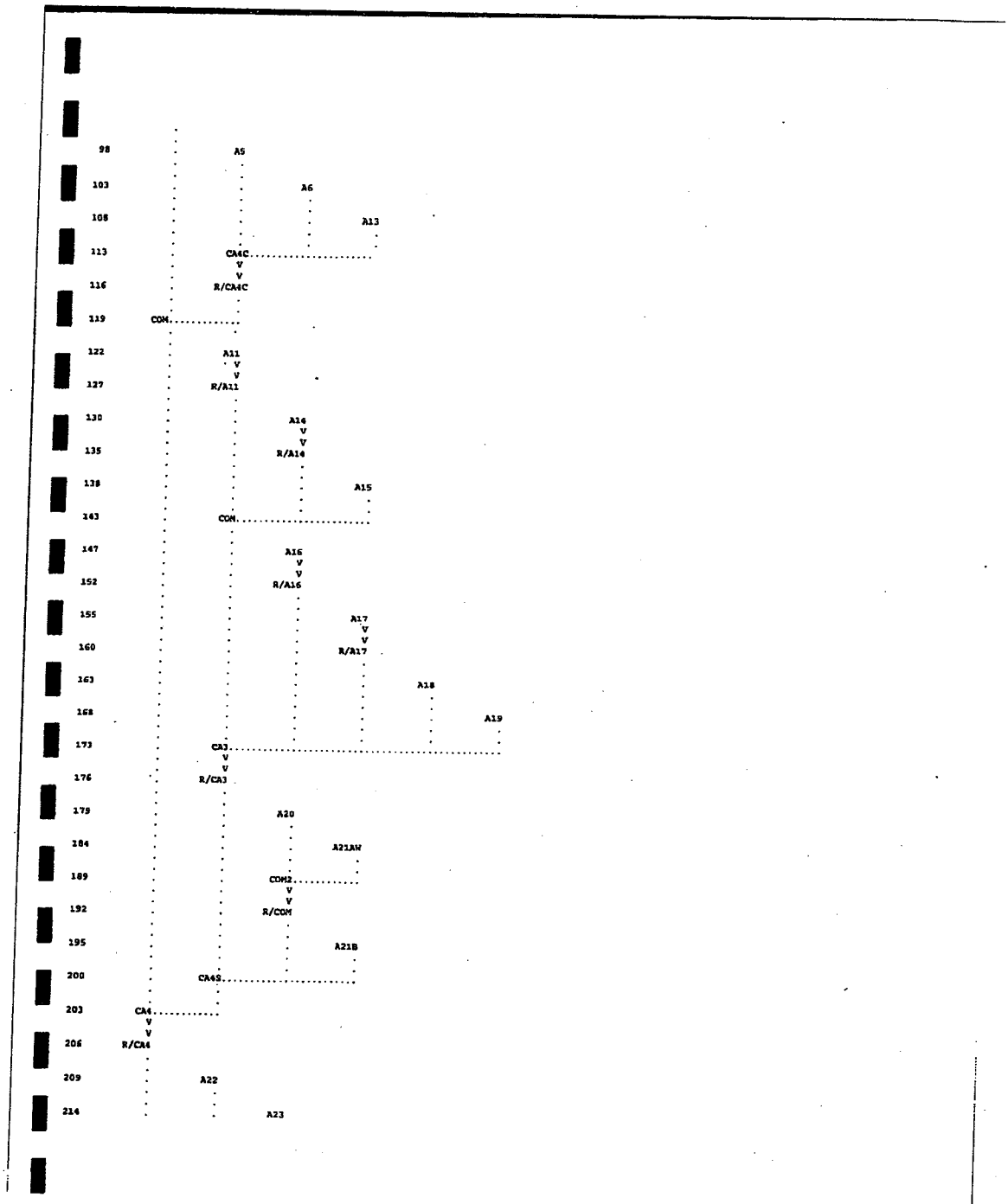
SCHEMATIC DIAGRAM OF STREAM NETWORK

INPUT LINE

(V) ROUTING (---->) DIVERSION OR PUMP FLOW

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




98
A5
103
A6
108
A13
113
CA4C
V
V
R/CA4C
116
119
COM
122
A11
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V
R/A11
127
130
A14
V
V
R/A14
135
138
A15
143
CON
147
A16
V
V
R/A16
152
155
A17
V
V
R/A17
160
163
A18
168
A19
173
CA3
V
V
R/CA3
176
179
A20
184
A21AW
189
COM2
V
V
R/COM
192
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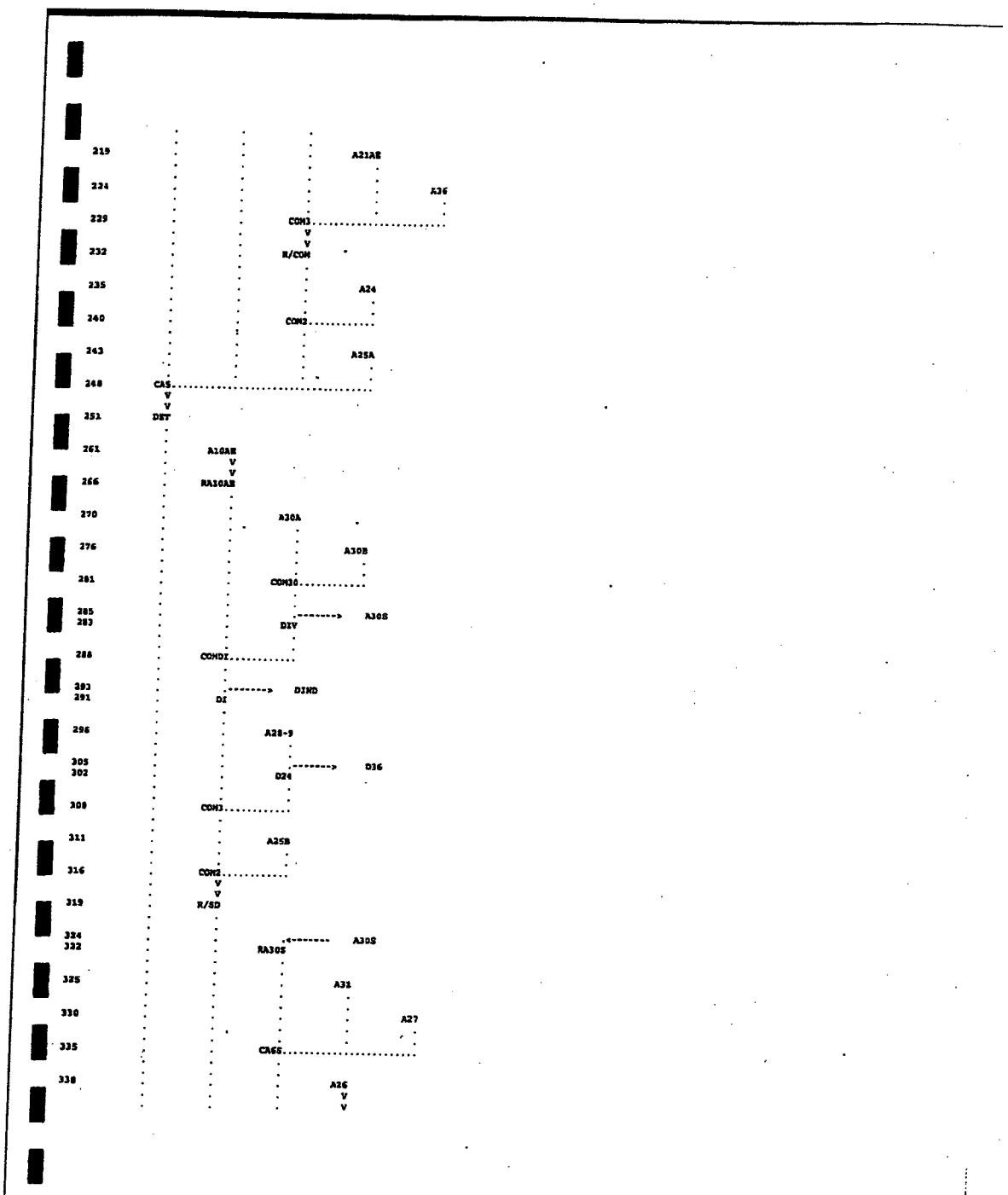
A21B
200
CA4S
203
CA4
V
V
R/CA4
206
209
A22
214
A23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288
293
291
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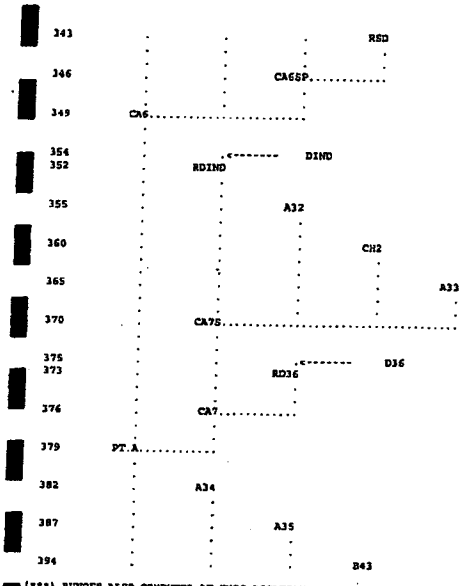
305
302
308
311
316
319
324
332
325
330
335
338
A21AE
A36
COM3
R/COM
A24
COM2
A25A
CAS
DET
A10AE
RA10AE
A30A
A30B
COM10
A30S
DIV
COMDI
DIND
DI
A28-9
D36
D24
COM3
A25B
COM2
R/SD
A30S
RA30S
A31
A27
CAGS
A26



(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*        JUN  1998                      *
*      VERSION 4.1                      *
*                                       *
* RUN DATE   22JUN00  TIME  13:11:10    *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*  U.S. ARMY CORPS OF ENGINEERS         *
*  HYDROLOGIC ENGINEERING CENTER        *
*       609 SECOND STREET               *
*    DAVIS, CALIFORNIA 95616            *
*       (916) 756-1104                  *
*                                       *
*****************************************
```

```
*****************************************************
*                                                   *
*  SUNKERLIN VILLAGE 13                             *
*  TOWN CENTER DRIVE                                *
*  PROPOSED CONDITIONS                              *
*                                                   *
*  RETURN PERIOD ____ 10-YEAR/100-YEAR              *
*  DISTRIBUTION____ 6-HOUR SDN3                     *
*  PROJECT NO_____ 52013.218                        *
*  FILENAME_______ V13TCD.N1                        *
*  REV. DATE ______ 06/21/99                        *
*  MODELED BY_____ AT                               *
*                                                   *
*****************************************************
```

```
16 IO        OUTPUT CONTROL VARIABLES
                 IPRNT         5  PRINT CONTROL
                 IPLOT         0  PLOT CONTROL
                 QSCAL        0.  HYDROGRAPH PLOT SCALE

 IT          HYDROGRAPH TIME DATA
                  NMIN         5  MINUTES IN COMPUTATION INTERVAL
                 IDATE     1    0  STARTING DATE
                 ITIME        0000  STARTING TIME
                    NQ         300  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE      2    0  ENDING DATE
               NDTIME         0955  ENDING TIME
                 ICENT           19  CENTURY MARK

            COMPUTATION INTERVAL      .08 HOURS
                TOTAL TIME BASE    24.92 HOURS
```

```
ENGLISH UNITS
     DRAINAGE AREA           SQUARE MILES
     PRECIPITATION DEPTH     INCHES
     LENGTH, ELEVATION       FEET
     FLOW                    CUBIC FEET PER SECOND
     STORAGE VOLUME          ACRE-FEET
     SURFACE AREA            ACRES
     TEMPERATURE             DEGREES FAHRENHEIT

JP            MULTI-PLAN OPTION
                  NPLAN          1  NUMBER OF PLANS

JR            MULTI-RATIO OPTION
                  RATIOS OF PRECIPITATION
                  .57      .89      1.00

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

              **************
              *            *
 251 KK       *    DET     *
              *            *
              **************

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

              HYDROGRAPH ROUTING DATA

 254 RS          STORAGE ROUTING
                      NSTPS          1  NUMBER OF SUBREACHES
                       ITYP       STOR  TYPE OF INITIAL CONDITION
                     RSVRIC      -1.00  INITIAL CONDITION
                          X        .00  WORKING R AND D COEFFICIENT

 255 SV          STORAGE        .0      .6     1.3     2.2     4.1     6.0     8.1    10.3    10.6    12.7
                              15.1

 257 SE          ELEVATION   39.50   41.00   41.50   42.00   43.00   44.00   45.00   46.00   46.10   47.00
                             48.00

 259 SQ          DISCHARGE    128.    165.    173.    181.    194.    207.    219.    230.    231.    497.
                             1139.

                                                     ***

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

                                        HYDROGRAPH AT STATION      DET
                                          PLAN 1,   RATIO =   .57

*******************************************************************************************************************
```

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.4	39.5	1		0820	101	128.	-.4	39.5	1		1640	201	128.	-.4	39.5
1		0005	2	128.	.0	39.5	1		0825	102	128.	-.4	39.5	1		1645	202	128.	-.4	39.5
1		0010	3	128.	-.4	39.5	1		0830	103	128.	-.4	39.5	1		1650	203	128.	-.4	39.5
1		0015	4	128.	-.4	39.5	1		0835	104	128.	-.4	39.5	1		1655	204	128.	-.4	39.5
1		0020	5	128.	-.4	39.5	1		0840	105	128.	-.4	39.5	1		1700	205	128.	-.4	39.5
1		0025	6	128.	-.4	39.5	1		0845	106	128.	-.4	39.5	1		1705	206	128.	-.4	39.5
1		0030	7	128.	-.4	39.5	1		0850	107	128.	-.4	39.5	1		1710	207	128.	-.4	39.5
1		0035	8	128.	-.4	39.5	1		0855	108	128.	-.4	39.5	1		1715	208	128.	-.4	39.5
1		0040	9	128.	-.4	39.5	1		0900	109	128.	-.4	39.5	1		1720	209	128.	-.4	39.5
1		0045	10	128.	-.4	39.5	1		0905	110	128.	-.4	39.5	1		1725	210	128.	-.4	39.5
1		0050	11	128.	-.4	39.5	1		0910	111	128.	-.4	39.5	1		1730	211	128.	-.4	39.5
1		0055	12	128.	-.4	39.5	1		0915	112	128.	-.4	39.5	1		1735	212	128.	-.4	39.5
1		0100	13	128.	-.4	39.5	1		0920	113	128.	-.4	39.5	1		1740	213	128.	-.4	39.5
1		0105	14	128.	-.4	39.5	1		0925	114	128.	-.4	39.5	1		1745	214	128.	-.4	39.5
1		0110	15	128.	-.4	39.5	1		0930	115	128.	-.4	39.5	1		1750	215	128.	-.4	39.5
1		0115	16	128.	-.4	39.5	1		0935	116	128.	-.4	39.5	1		1755	216	128.	-.4	39.5
1		0120	17	128.	-.4	39.5	1		0940	117	128.	-.4	39.5	1		1800	217	128.	-.4	39.5
1		0125	18	128.	-.4	39.5	1		0945	118	128.	-.4	39.5	1		1805	218	128.	-.4	39.5
1		0130	19	128.	-.4	39.5	1		0950	119	128.	-.4	39.5	1		1810	219	128.	-.4	39.5
1		0135	20	128.	-.4	39.5	1		0955	120	128.	-.4	39.5	1		1815	220	128.	-.4	39.5
1		0140	21	128.	-.4	39.5	1		1000	121	128.	-.4	39.5	1		1820	221	128.	-.4	39.5
1		0145	22	128.	-.4	39.5	1		1005	122	128.	-.4	39.5	1		1825	222	128.	-.4	39.5
1		0150	23	128.	-.4	39.5	1		1010	123	128.	-.4	39.5	1		1830	223	128.	-.4	39.5
1		0155	24	128.	-.4	39.5	1		1015	124	128.	-.4	39.5	1		1835	224	128.	-.4	39.5
1		0200	25	128.	-.4	39.5	1		1020	125	128.	-.4	39.5	1		1840	225	128.	-.4	39.5
1		0205	26	128.	-.4	39.5	1		1025	126	128.	-.4	39.5	1		1845	226	128.	-.4	39.5
1		0210	27	128.	-.4	39.5	1		1030	127	128.	-.4	39.5	1		1850	227	128.	-.4	39.5
1		0215	28	128.	-.4	39.5	1		1035	128	128.	-.4	39.5	1		1855	228	128.	-.4	39.5
1		0220	29	128.	-.4	39.5	1		1040	129	128.	-.4	39.5	1		1900	229	128.	-.4	39.5
1		0225	30	128.	-.4	39.5	1		1045	130	128.	-.4	39.5	1		1905	230	128.	-.4	39.5

1	0230	31	128.	-.4	39.5	1	1050	131	128.	-.4	39.5	1	1910	231	128.	-.4	39.5
1	0235	32	128.	-.4	39.5	1	1055	132	128.	-.4	39.5	1	1915	232	128.	-.4	39.5
1	0240	33	128.	-.4	39.5	1	1100	133	128.	-.4	39.5	1	1920	233	128.	-.4	39.5
1	0245	34	128.	-.4	39.5	1	1105	134	128.	-.4	39.5	1	1925	234	128.	-.4	39.5
1	0250	35	128.	-.4	39.5	1	1110	135	128.	-.4	39.5	1	1930	235	128.	-.4	39.5
1	0255	36	128.	-.4	39.5	1	1115	136	128.	-.4	39.5	1	1935	236	128.	-.4	39.5
1	0300	37	128.	-.4	39.5	1	1120	137	128.	-.4	39.5	1	1940	237	128.	-.4	39.5
1	0305	38	128.	-.4	39.5	1	1125	138	128.	-.4	39.5	1	1945	238	128.	-.4	39.5
1	0310	39	128.	-.4	39.5	1	1130	139	128.	-.4	39.5	1	1950	239	128.	-.4	39.5
1	0315	40	128.	-.4	39.5	1	1135	140	128.	-.4	39.5	1	1955	240	128.	-.4	39.5
1	0320	41	128.	-.4	39.5	1	1140	141	128.	-.4	39.5	1	2000	241	128.	-.4	39.5
1	0325	42	128.	-.1	39.5	1	1145	142	128.	-.4	39.5	1	2005	242	128.	-.4	39.5
1	0330	43	163.	.6	40.9	1	1150	143	128.	-.4	39.5	1	2010	243	128.	-.4	39.5
1	0335	44	174.	1.4	41.6	1	1155	144	128.	-.4	39.5	1	2015	244	128.	-.4	39.5
1	0340	45	180.	2.1	42.0	1	1200	145	128.	-.4	39.5	1	2020	245	128.	-.4	39.5
1	0345	46	183.	2.4	42.1	1	1205	146	128.	-.4	39.5	1	2025	246	128.	-.4	39.5
1	0350	47	182.	2.4	42.1	1	1210	147	128.	-.4	39.5	1	2030	247	128.	-.4	39.5
1	0355	48	179.	2.0	41.9	1	1215	148	128.	-.4	39.5	1	2035	248	128.	-.4	39.5
1	0400	49	174.	1.4	41.6	1	1220	149	128.	-.4	39.5	1	2040	249	128.	-.4	39.5
1	0405	50	167.	.7	41.1	1	1225	150	128.	-.4	39.5	1	2045	250	128.	-.4	39.5
1	0410	51	134.	.1	39.7	1	1230	151	128.	-.4	39.5	1	2050	251	128.	-.4	39.5
1	0415	52	128.	-.4	39.5	1	1235	152	128.	-.4	39.5	1	2055	252	128.	-.4	39.5
1	0420	53	128.	-.4	39.5	1	1240	153	128.	-.4	39.5	1	2100	253	128.	-.4	39.5
1	0425	54	128.	-.4	39.5	1	1245	154	128.	-.4	39.5	1	2105	254	128.	-.4	39.5
1	0430	55	128.	-.4	39.5	1	1250	155	128.	-.4	39.5	1	2110	255	128.	-.4	39.5
1	0435	56	128.	-.4	39.5	1	1255	156	128.	-.4	39.5	1	2115	256	128.	-.4	39.5
1	0440	57	128.	-.4	39.5	1	1300	157	128.	-.4	39.5	1	2120	257	128.	-.4	39.5
1	0445	58	128.	-.4	39.5	1	1305	158	128.	-.4	39.5	1	2125	258	128.	-.4	39.5
1	0450	59	128.	-.4	39.5	1	1310	159	128.	-.4	39.5	1	2130	259	128.	-.4	39.5
1	0455	60	128.	-.4	39.5	1	1315	160	128.	-.4	39.5	1	2135	260	128.	-.4	39.5
1	0500	61	128.	-.4	39.5	1	1320	161	128.	-.4	39.5	1	2140	261	128.	-.4	39.5
1	0505	62	128.	-.4	39.5	1	1325	162	128.	-.4	39.5	1	2145	262	128.	-.4	39.5
1	0510	63	128.	-.4	39.5	1	1330	163	128.	-.4	39.5	1	2150	263	128.	-.4	39.5
1	0515	64	128.	-.4	39.5	1	1335	164	128.	-.4	39.5	1	2155	264	128.	-.4	39.5
1	0520	65	128.	-.4	39.5	1	1340	165	128.	-.4	39.5	1	2200	265	128.	-.4	39.5
1	0525	66	128.	-.4	39.5	1	1345	166	128.	-.4	39.5	1	2205	266	128.	-.4	39.5
1	0530	67	128.	-.4	39.5	1	1350	167	128.	-.4	39.5	1	2210	267	128.	-.4	39.5
1	0535	68	128.	-.4	39.5	1	1355	168	128.	-.4	39.5	1	2215	268	128.	-.4	39.5
1	0540	69	128.	-.4	39.5	1	1400	169	128.	-.4	39.5	1	2220	269	128.	-.4	39.5
1	0545	70	128.	-.4	39.5	1	1405	170	128.	-.4	39.5	1	2225	270	128.	-.4	39.5
1	0550	71	128.	-.4	39.5	1	1410	171	128.	-.4	39.5	1	2230	271	128.	-.4	39.5
1	0555	72	128.	-.4	39.5	1	1415	172	128.	-.4	39.5	1	2235	272	128.	-.4	39.5
1	0600	73	128.	-.4	39.5	1	1420	173	128.	-.4	39.5	1	2240	273	128.	-.4	39.5
1	0605	74	128.	-.4	39.5	1	1425	174	128.	-.4	39.5	1	2245	274	128.	-.4	39.5
1	0610	75	128.	-.4	39.5	1	1430	175	128.	-.4	39.5	1	2250	275	128.	-.4	39.5
1	0615	76	128.	-.4	39.5	1	1435	176	128.	-.4	39.5	1	2255	276	128.	-.4	39.5
1	0620	77	128.	-.4	39.5	1	1440	177	128.	-.4	39.5	1	2300	277	128.	-.4	39.5
1	0625	78	128.	-.4	39.5	1	1445	178	128.	-.4	39.5	1	2305	278	128.	-.4	39.5
1	0630	79	128.	-.4	39.5	1	1450	179	128.	-.4	39.5	1	2310	279	128.	-.4	39.5
1	0635	80	128.	-.4	39.5	1	1455	180	128.	-.4	39.5	1	2315	280	128.	-.4	39.5
1	0640	81	128.	-.4	39.5	1	1500	181	128.	-.4	39.5	1	2320	281	128.	-.4	39.5
1	0645	82	128.	-.4	39.5	1	1505	182	128.	-.4	39.5	1	2325	282	128.	-.4	39.5
1	0650	83	128.	-.4	39.5	1	1510	183	128.	-.4	39.5	1	2330	283	128.	-.4	39.5
1	0655	84	128.	-.4	39.5	1	1515	184	128.	-.4	39.5	1	2335	284	128.	-.4	39.5
1	0700	85	128.	-.4	39.5	1	1520	185	128.	-.4	39.5	1	2340	285	128.	-.4	39.5
1	0705	86	128.	-.4	39.5	1	1525	186	128.	-.4	39.5	1	2345	286	128.	-.4	39.5
1	0710	87	128.	-.4	39.5	1	1530	187	128.	-.4	39.5	1	2350	287	128.	-.4	39.5
1	0715	88	128.	-.4	39.5	1	1535	188	128.	-.4	39.5	1	2355	288	128.	-.4	39.5
1	0720	89	128.	-.4	39.5	1	1540	189	128.	-.4	39.5	2	0000	289	128.	-.4	39.5
1	0725	90	128.	-.4	39.5	1	1545	190	128.	-.4	39.5	2	0005	290	128.	-.4	39.5
1	0730	91	128.	-.4	39.5	1	1550	191	128.	-.4	39.5	2	0010	291	128.	-.4	39.5
1	0735	92	128.	-.4	39.5	1	1555	192	128.	-.4	39.5	2	0015	292	128.	-.4	39.5
1	0740	93	129.	-.4	39.5	1	1600	193	128.	-.4	39.5	2	0020	293	128.	-.4	39.5
1	0745	94	128.	-.4	39.5	1	1605	194	128.	-.4	39.5	2	0025	294	128.	-.4	39.5
1	0750	95	128.	-.4	39.5	1	1610	195	128.	-.4	39.5	2	0030	295	128.	-.4	39.5
1	0755	96	128.	-.4	39.5	1	1615	196	128.	-.4	39.5	2	0035	296	128.	-.4	39.5
1	0800	97	128.	-.4	39.5	1	1620	197	128.	-.4	39.5	2	0040	297	128.	-.4	39.5
1	0805	98	128.	-.4	39.5	1	1625	198	128.	-.4	39.5	2	0045	298	128.	-.4	39.5
1	0810	99	128.	-.4	39.5	1	1630	199	128.	-.4	39.5	2	0050	299	128.	-.4	39.5
1	0815	100	128.	-.4	39.5	1	1635	200	128.	-.4	39.5	2	0055	300	128.	-.4	39.5

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
(CFS)	(HR)	(CFS)				
183.	3.75		133.	129.	129.	129.
		(INCHES)	3.952	15.333	15.886	15.886
		(AC-FT)	66.	257.	266.	266.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
(AC-FT)	(HR)				
2.	3.75	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
(FEET)	(HR)				
42.12	3.75	39.74	39.56	39.56	39.56

CUMULATIVE AREA = .31 SQ MI

HYDROGRAPH AT STATION DST
PLAN 1, RATIO = .99

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.4	39.5
1		0005	2	128.	.0	39.5
1		0010	3	128.	-.4	39.5
1		0015	4	128.	-.4	39.5
1		0020	5	128.	-.4	39.5
1		0025	6	128.	-.4	39.5
1		0030	7	128.	-.4	39.5
1		0035	8	128.	-.4	39.5
1		0040	9	128.	-.4	39.5
1		0045	10	128.	-.4	39.5
1		0050	11	128.	-.4	39.5
1		0055	12	128.	-.4	39.5
1		0100	13	128.	-.4	39.5
1		0105	14	128.	-.4	39.5
1		0110	15	128.	-.4	39.5
1		0115	16	128.	-.4	39.5
1		0120	17	128.	-.4	39.5
1		0125	18	128.	-.4	39.5
1		0130	19	128.	-.4	39.5
1		0135	20	128.	-.4	39.5
1		0140	21	128.	-.4	39.5
1		0145	22	128.	-.4	39.5
1		0150	23	128.	-.4	39.5
1		0155	24	128.	-.4	39.5
1		0200	25	128.	-.4	39.5
1		0205	26	128.	-.4	39.5
1		0210	27	128.	-.4	39.5
1		0215	28	128.	-.4	39.5
1		0220	29	128.	-.4	39.5
1		0225	30	128.	-.4	39.5
1		0230	31	128.	-.4	39.5
1		0235	32	128.	-.4	39.5
1		0240	33	128.	-.4	39.5
1		0245	34	128.	-.4	39.5
1		0250	35	128.	-.4	39.5
1		0255	36	128.	-.4	39.5
1		0300	37	128.	-.4	39.5
1		0305	38	128.	-.4	39.5
1		0310	39	128.	-.4	39.5
1		0315	40	128.	-.4	39.5
1		0320	41	144.	.3	40.2
1		0325	42	176.	1.6	41.7
1		0330	43	192.	2.8	42.8
1		0335	44	209.	6.3	44.1
1		0340	45	221.	8.5	45.2
1		0345	46	228.	9.9	45.8
1		0350	47	231.	10.6	46.1
1		0355	48	231.	10.6	46.1
1		0400	49	229.	10.1	45.9
1		0405	50	226.	9.5	45.6
1		0410	51	222.	8.7	45.2
1		0415	52	216.	7.7	44.8
1		0420	53	210.	6.6	44.3
1		0425	54	204.	5.6	43.8
1		0430	55	198.	4.7	43.3
1		0435	56	193.	4.0	42.9
1		0440	57	189.	3.4	42.6
1		0445	58	185.	2.8	42.3
1		0450	59	182.	2.3	42.0
1		0455	60	177.	1.8	41.8
1		0500	61	172.	1.2	41.4
1		0505	62	164.	.6	41.0
1		0510	63	128.	-.1	39.5
1		0515	64	128.	-.4	39.5
1		0520	65	128.	-.4	39.5
1		0525	66	128.	-.4	39.5
1		0530	67	128.	-.4	39.5
1		0535	68	128.	-.4	39.5
1		0540	69	128.	-.4	39.5
1		0545	70	128.	-.4	39.5
1		0550	71	128.	-.4	39.5
1		0555	72	128.	-.4	39.5
1		0600	73	128.	-.4	39.5
1		0605	74	128.	-.4	39.5
1		0610	75	128.	-.4	39.5
1		0615	76	128.	-.4	39.5
1		0620	77	128.	-.4	39.5
1		0625	78	128.	-.4	39.5
1		0630	101	128.	-.4	39.5
1		0635	102	128.	-.4	39.5
1		0640	103	128.	-.4	39.5
1		0645	104	128.	-.4	39.5
1		0650	105	128.	-.4	39.5
1		0655	106	128.	-.4	39.5
1		0700	107	128.	-.4	39.5
1		0705	108	128.	-.4	39.5
1		0710	109	128.	-.4	39.5
1		0715	110	128.	-.4	39.5
1		0720	111	128.	-.4	39.5
1		0725	112	128.	-.4	39.5
1		0730	113	128.	-.4	39.5
1		0735	114	128.	-.4	39.5
1		0740	115	128.	-.4	39.5
1		0745	116	128.	-.4	39.5
1		0750	117	128.	-.4	39.5
1		0755	118	128.	-.4	39.5
1		0800	119	128.	-.4	39.5
1		0805	120	128.	-.4	39.5
1		0810	121	128.	-.4	39.5
1		0815	122	128.	-.4	39.5
1		0820	123	128.	-.4	39.5
1		0825	124	128.	-.4	39.5
1		0830	125	128.	-.4	39.5
1		0835	126	128.	-.4	39.5
1		0840	127	128.	-.4	39.5
1		0845	128	128.	-.4	39.5
1		0850	129	128.	-.4	39.5
1		0855	130	128.	-.4	39.5
1		0900	131	128.	-.4	39.5
1		0905	132	128.	-.4	39.5
1		0910	133	128.	-.4	39.5
1		0915	134	128.	-.4	39.5
1		0920	135	128.	-.4	39.5
1		0925	136	128.	-.4	39.5
1		0930	137	128.	-.4	39.5
1		0935	138	128.	-.4	39.5
1		0940	139	128.	-.4	39.5
1		0945	140	128.	-.4	39.5
1		0950	141	128.	-.4	39.5
1		0955	142	128.	-.4	39.5
1		1000	143	128.	-.4	39.5
1		1005	144	128.	-.4	39.5
1		1010	145	128.	-.4	39.5
1		1015	146	128.	-.4	39.5
1		1020	147	128.	-.4	39.5
1		1025	148	128.	-.4	39.5
1		1030	149	128.	-.4	39.5
1		1035	150	128.	-.4	39.5
1		1040	151	128.	-.4	39.5
1		1045	152	128.	-.4	39.5
1		1050	153	128.	-.4	39.5
1		1055	154	128.	-.4	39.5
1		1100	155	128.	-.4	39.5
1		1105	156	128.	-.4	39.5
1		1110	157	128.	-.4	39.5
1		1115	158	128.	-.4	39.5
1		1120	159	128.	-.4	39.5
1		1125	160	128.	-.4	39.5
1		1130	161	128.	-.4	39.5
1		1135	162	128.	-.4	39.5
1		1140	163	128.	-.4	39.5
1		1145	164	128.	-.4	39.5
1		1150	165	128.	-.4	39.5
1		1155	166	128.	-.4	39.5
1		1200	167	128.	-.4	39.5
1		1205	168	128.	-.4	39.5
1		1210	169	128.	-.4	39.5
1		1215	170	128.	-.4	39.5
1		1220	171	128.	-.4	39.5
1		1225	172	128.	-.4	39.5
1		1230	173	128.	-.4	39.5
1		1235	174	128.	-.4	39.5
1		1240	175	128.	-.4	39.5
1		1245	176	128.	-.4	39.5
1		1250	177	128.	-.4	39.5
1		1255	178	128.	-.4	39.5
1		1300	179	128.	-.4	39.5
1		1305	180	128.	-.4	39.5
1		1310	181	128.	-.4	39.5
1		1315	182	128.	-.4	39.5
1		1320	183	128.	-.4	39.5
1		1325	184	128.	-.4	39.5
1		1330	185	128.	-.4	39.5
1		1335	186	128.	-.4	39.5
1		1340	187	128.	-.4	39.5
1		1345	188	128.	-.4	39.5
1		1350	189	128.	-.4	39.5
1		1355	190	128.	-.4	39.5
1		1400	191	128.	-.4	39.5
1		1405	192	128.	-.4	39.5
1		1410	193	128.	-.4	39.5
1		1415	194	128.	-.4	39.5
1		1420	195	128.	-.4	39.5
1		1425	196	128.	-.4	39.5
1		1430	197	128.	-.4	39.5
1		1435	198	128.	-.4	39.5
1		1440	199	128.	-.4	39.5
1		1445	200	128.	-.4	39.5
1		1640	201	128.	-.4	39.5
1		1645	202	128.	-.4	39.5
1		1650	203	128.	-.4	39.5
1		1655	204	128.	-.4	39.5
1		1700	205	128.	-.4	39.5
1		1705	206	128.	-.4	39.5
1		1710	207	128.	-.4	39.5
1		1715	208	128.	-.4	39.5
1		1720	209	128.	-.4	39.5
1		1725	210	128.	-.4	39.5
1		1730	211	128.	-.4	39.5
1		1735	212	128.	-.4	39.5
1		1740	213	128.	-.4	39.5
1		1745	214	128.	-.4	39.5
1		1750	215	128.	-.4	39.5
1		1755	216	128.	-.4	39.5
1		1800	217	128.	-.4	39.5
1		1805	218	128.	-.4	39.5
1		1810	219	128.	-.4	39.5
1		1815	220	128.	-.4	39.5
1		1820	221	128.	-.4	39.5
1		1825	222	128.	-.4	39.5
1		1830	223	128.	-.4	39.5
1		1835	224	128.	-.4	39.5
1		1840	225	128.	-.4	39.5
1		1845	226	128.	-.4	39.5
1		1850	227	128.	-.4	39.5
1		1855	228	128.	-.4	39.5
1		1900	229	128.	-.4	39.5
1		1905	230	128.	-.4	39.5
1		1910	231	128.	-.4	39.5
1		1915	232	128.	-.4	39.5
1		1920	233	128.	-.4	39.5
1		1925	234	128.	-.4	39.5
1		1930	235	128.	-.4	39.5
1		1935	236	128.	-.4	39.5
1		1940	237	128.	-.4	39.5
1		1945	238	128.	-.4	39.5
1		1950	239	128.	-.4	39.5
1		1955	240	128.	-.4	39.5
1		2000	241	128.	-.4	39.5
1		2005	242	128.	-.4	39.5
1		2010	243	128.	-.4	39.5
1		2015	244	128.	-.4	39.5
1		2020	245	128.	-.4	39.5
1		2025	246	128.	-.4	39.5
1		2030	247	128.	-.4	39.5
1		2035	248	128.	-.4	39.5
1		2040	249	128.	-.4	39.5
1		2045	250	128.	-.4	39.5
1		2050	251	128.	-.4	39.5
1		2055	252	128.	-.4	39.5
1		2100	253	128.	-.4	39.5
1		2105	254	128.	-.4	39.5
1		2110	255	128.	-.4	39.5
1		2115	256	128.	-.4	39.5
1		2120	257	128.	-.4	39.5
1		2125	258	128.	-.4	39.5
1		2130	259	128.	-.4	39.5
1		2135	260	128.	-.4	39.5
1		2140	261	128.	-.4	39.5
1		2145	262	128.	-.4	39.5
1		2150	263	128.	-.4	39.5
1		2155	264	128.	-.4	39.5
1		2200	265	128.	-.4	39.5
1		2205	266	128.	-.4	39.5
1		2210	267	128.	-.4	39.5
1		2215	268	128.	-.4	39.5
1		2220	269	128.	-.4	39.5
1		2225	270	128.	-.4	39.5
1		2230	271	128.	-.4	39.5
1		2235	272	128.	-.4	39.5
1		2240	273	128.	-.4	39.5
1		2245	274	128.	-.4	39.5
1		2250	275	128.	-.4	39.5
1		2255	276	128.	-.4	39.5
1		2300	277	128.	-.4	39.5
1		2305	278	128.	-.4	39.5

1	0255	36	128.	-.4	39.5	*	1	1135	136	128.	-.4	39.5	*	1	1935	236	128.	-.4	39.5
1	0300	37	128.	-.4	39.5	*	1	1140	137	128.	-.4	39.5	*	1	1940	237	128.	-.4	39.5
1	0305	38	128.	-.4	39.5	*	1	1145	138	128.	-.4	39.5	*	1	1945	238	128.	-.4	39.5
1	0310	39	128.	-.4	39.5	*	1	1150	139	128.	-.4	39.5	*	1	1950	239	128.	-.4	39.5
1	0315	40	128.	-.4	39.5	*	1	1155	140	128.	-.4	39.5	*	1	1955	240	128.	-.4	39.5
1	0320	41	146.	.3	40.2	*	1	1200	141	128.	-.4	39.5	*	1	2000	241	128.	-.4	39.5
1	0325	42	176.	1.7	41.7	*	1	1205	142	128.	-.4	39.5	*	1	2005	242	128.	-.4	39.5
1	0330	43	193.	3.9	42.9	*	1	1210	143	128.	-.4	39.5	*	1	2010	243	128.	-.4	39.5
1	0335	44	209.	6.5	44.2	*	1	1215	144	128.	-.4	39.5	*	1	2015	244	128.	-.4	39.5
1	0340	45	222.	8.7	45.3	*	1	1220	145	128.	-.4	39.5	*	1	2020	245	128.	-.4	39.5
1	0345	46	229.	10.1	45.9	*	1	1225	146	128.	-.4	39.5	*	1	2025	246	128.	-.4	39.5
1	0350	47	248.	10.7	46.2	*	1	1230	147	128.	-.4	39.5	*	1	2030	247	128.	-.4	39.5
1	0355	48	240.	10.6	46.1	*	1	1235	148	128.	-.4	39.5	*	1	2035	248	128.	-.4	39.5
1	0400	49	229.	10.2	45.9	*	1	1240	149	128.	-.4	39.5	*	1	2040	249	128.	-.4	39.5
1	0405	50	226.	9.6	45.6	*	1	1245	150	128.	-.4	39.5	*	1	2045	250	128.	-.4	39.5
1	0410	51	222.	8.7	45.3	*	1	1250	151	128.	-.4	39.5	*	1	2050	251	128.	-.4	39.5
1	0415	52	217.	7.7	44.8	*	1	1255	152	128.	-.4	39.5	*	1	2055	252	128.	-.4	39.5
1	0420	53	211.	6.7	44.3	*	1	1240	153	128.	-.4	39.5	*	1	2100	253	128.	-.4	39.6
1	0425	54	205.	5.7	43.8	*	1	1245	154	128.	-.4	39.5	*	1	2105	254	128.	-.4	39.5
1	0430	55	199.	4.8	43.4	*	1	1250	155	128.	-.4	39.5	*	1	2110	255	128.	-.4	39.5
1	0435	56	194.	4.1	43.0	*	1	1255	156	128.	-.4	39.5	*	1	2115	256	128.	-.4	39.5
1	0440	57	190.	3.5	42.7	*	1	1300	157	128.	-.4	39.5	*	1	2120	257	128.	-.4	39.5
1	0445	58	186.	2.9	42.4	*	1	1305	158	128.	-.4	39.5	*	1	2125	258	128.	-.4	39.5
1	0450	59	182.	2.4	42.1	*	1	1310	159	128.	-.4	39.5	*	1	2130	259	128.	-.4	39.5
1	0455	60	178.	1.9	41.8	*	1	1315	160	128.	-.4	39.5	*	1	2135	260	128.	-.4	39.5
1	0500	61	173.	1.3	41.5	*	1	1320	161	128.	-.4	39.5	*	1	2140	261	128.	-.4	39.5
1	0505	62	166.	.7	41.1	*	1	1325	162	128.	-.4	39.5	*	1	2145	262	128.	-.4	39.5
1	0510	63	130.	.0	39.6	*	1	1330	163	128.	-.4	39.5	*	1	2150	263	128.	-.4	39.5
1	0515	64	128.	-.4	39.5	*	1	1335	164	128.	-.4	39.5	*	1	2155	264	128.	-.4	39.5
1	0520	65	128.	-.4	39.5	*	1	1340	165	128.	-.4	39.5	*	1	2200	265	128.	-.4	39.5
1	0525	66	128.	-.4	39.5	*	1	1345	166	128.	-.4	39.5	*	1	2205	266	128.	-.4	39.5
1	0530	67	128.	-.4	39.5	*	1	1350	167	128.	-.4	39.5	*	1	2210	267	128.	-.4	39.5
1	0535	68	128.	-.4	39.5	*	1	1355	168	128.	-.4	39.5	*	1	2215	268	128.	-.4	39.5
1	0540	69	128.	-.4	39.5	*	1	1400	169	128.	-.4	39.5	*	1	2220	269	128.	-.4	39.5
1	0545	70	128.	-.4	39.5	*	1	1405	170	128.	-.4	39.5	*	1	2225	270	128.	-.4	39.5
1	0550	71	128.	-.4	39.5	*	1	1410	171	128.	-.4	39.5	*	1	2230	271	128.	-.4	39.5
1	0555	72	128.	-.4	39.5	*	1	1415	172	128.	-.4	39.5	*	1	2235	272	128.	-.4	39.5
1	0600	73	128.	-.4	39.5	*	1	1420	173	128.	-.4	39.5	*	1	2240	273	128.	-.4	39.5
1	0605	74	128.	-.4	39.5	*	1	1425	174	128.	-.4	39.5	*	1	2245	274	128.	-.4	39.5
1	0610	75	128.	-.4	39.5	*	1	1430	175	128.	-.4	39.5	*	1	2250	275	128.	-.4	39.5
1	0615	76	128.	-.4	39.5	*	1	1435	176	128.	-.4	39.5	*	1	2255	276	128.	-.4	39.5
1	0620	77	128.	-.4	39.5	*	1	1440	177	128.	-.4	39.5	*	1	2300	277	128.	-.4	39.5
1	0625	78	128.	-.4	39.5	*	1	1445	178	128.	-.4	39.5	*	1	2305	278	128.	-.4	39.5
1	0630	79	128.	-.4	39.5	*	1	1450	179	128.	-.4	39.5	*	1	2310	279	128.	-.4	39.5
1	0635	80	128.	-.4	39.5	*	1	1455	180	128.	-.4	39.5	*	1	2315	280	128.	-.4	39.5
1	0640	81	128.	-.4	39.5	*	1	1500	181	128.	-.4	39.5	*	1	2320	281	128.	-.4	39.5
1	0645	82	128.	-.4	39.5	*	1	1505	182	128.	-.4	39.5	*	1	2325	282	128.	-.4	39.5
1	0650	83	128.	-.4	39.5	*	1	1510	183	128.	-.4	39.5	*	1	2330	283	128.	-.4	39.5
1	0655	84	128.	-.4	39.5	*	1	1515	184	128.	-.4	39.5	*	1	2335	284	128.	-.4	39.5
1	0700	85	128.	-.4	39.5	*	1	1520	185	128.	-.4	39.5	*	1	2340	285	128.	-.4	39.5
1	0705	86	128.	-.4	39.5	*	1	1525	186	128.	-.4	39.5	*	1	2345	286	128.	-.4	39.5
1	0710	87	128.	-.4	39.5	*	1	1530	187	128.	-.4	39.5	*	1	2350	287	128.	-.4	39.5
1	0715	88	128.	-.4	39.5	*	1	1535	188	128.	-.4	39.5	*	1	2355	288	128.	-.4	39.5
1	0720	89	128.	-.4	39.5	*	1	1540	189	128.	-.4	39.5	*	2	0000	289	128.	-.4	39.5
1	0725	90	128.	-.4	39.5	*	1	1545	190	128.	-.4	39.5	*	2	0005	290	128.	-.4	39.5
1	0730	91	128.	-.4	39.5	*	1	1550	191	128.	-.4	39.5	*	2	0010	291	128.	-.4	39.5
1	0735	92	128.	-.4	39.5	*	1	1555	192	128.	-.4	39.5	*	2	0015	292	128.	-.4	39.5
1	0740	93	128.	-.4	39.5	*	1	1600	193	128.	-.4	39.5	*	2	0020	293	128.	-.4	39.5
1	0745	94	128.	-.4	39.5	*	1	1605	194	128.	-.4	39.5	*	2	0025	294	128.	-.4	39.5
1	0750	95	128.	-.4	39.5	*	1	1610	195	128.	-.4	39.5	*	2	0030	295	128.	-.4	39.5
1	0755	96	128.	-.4	39.5	*	1	1615	196	128.	-.4	39.5	*	2	0035	296	128.	-.4	39.5
1	0800	97	128.	-.4	39.5	*	1	1620	197	128.	-.4	39.5	*	2	0040	297	128.	-.4	39.5
1	0805	98	128.	-.4	39.5	*	1	1625	198	128.	-.4	39.5	*	2	0045	298	128.	-.4	39.5
1	0810	99	128.	-.4	39.5	*	1	1630	199	128.	-.4	39.5	*	2	0050	299	128.	-.4	39.5
1	0815	100	128.	-.4	39.5	*	1	1635	200	128.	-.4	39.5	*	2	0055	300	128.	-.4	39.5

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
(CFS)	(HR)	(CFS)				
248.	3.83		151.	134.	133.	133.
		(INCHES)	4.463	15.865	16.398	16.398
		(AC-FT)	75.	265.	274.	274.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
(AC-FT)	(HR)				
11.	3.83	1.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
(FEET)	(HR)				
46.16	3.83	40.77	39.82	39.81	39.81

CUMULATIVE AREA = .31 SQ MI

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 .57	RATIO 2 .99	RATIO 3 1.00
HYDROGRAPH AT	A1	.06	1	FLOW	62.	117.	118.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A2A	.00	1	FLOW	3.	6.	7.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A2B	.00	1	FLOW	5.	9.	9.
				TIME	3.50	3.50	3.50
3 COMBINED AT	CA1	.07	1	FLOW	68.	129.	130.
				TIME	3.58	3.58	3.58
ROUTED TO	R/CA1	.07	1	FLOW	66.	125.	127.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	X	.04	1	FLOW	47.	88.	89.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A7	.02	1	FLOW	17.	32.	32.
				TIME	3.58	3.50	3.50
ROUTED TO	R/A7	.02	1	FLOW	17.	31.	31.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A8	.02	1	FLOW	17.	33.	34.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A9	.01	1	FLOW	11.	20.	21.
				TIME	3.50	3.50	3.50
5 COMBINED AT	CA2	.15	1	FLOW	156.	295.	299.
				TIME	3.58	3.58	3.58
ROUTED TO	R/CA2	.15	1	FLOW	153.	291.	295.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	CH1	.00	1	FLOW	3.	6.	6.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A10AM	.00	1	FLOW	2.	5.	5.
				TIME	3.50	3.50	3.50
2 COMBINED AT	CDM	.00	1	FLOW	6.	11.	11.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A10B	.00	1	FLOW	4.	8.	8.
				TIME	3.50	3.50	3.50
3 COMBINED AT	CA4N	.16	1	FLOW	161.	306.	310.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A5	.02	1	FLOW	24.	45.	46.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A6	.00	1	FLOW	3.	5.	5.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A13	.00	1	FLOW	3.	5.	5.
				TIME	3.50	3.50	3.50
3 COMBINED AT							

	CA4C	.03	1	FLOW	29.	55.	55.
				TIME	3.50	3.50	3.50
ROUTED TO							
	R/CA4C	.03	1	FLOW	26.	51.	52.
				TIME	3.50	3.50	3.50
2 COMBINED AT							
	CON	.19	1	FLOW	188.	356.	360.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT							
	A11	.01	1	FLOW	7.	15.	15.
				TIME	3.58	3.50	3.50
ROUTED TO							
	R/A11	.01	1	FLOW	6.	15.	15.
				TIME	3.67	3.67	3.67
HYDROGRAPH AT							
	A14	.01	1	FLOW	15.	29.	29.
				TIME	3.50	3.50	3.50
ROUTED TO							
	R/A14	.01	1	FLOW	15.	28.	28.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT							
	A15	.02	1	FLOW	18.	34.	35.
				TIME	3.50	3.50	3.50
3 COMBINED AT							
	COM	.04	1	FLOW	36.	75.	75.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT							
	A16	.01	1	FLOW	10.	18.	19.
				TIME	3.50	3.50	3.50
ROUTED TO							
	R/A16	.01	1	FLOW	9.	18.	18.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT							
	A17	.00	1	FLOW	1.	2.	2.
				TIME	3.50	3.50	3.50
ROUTED TO							
	R/A17	.00	1	FLOW	1.	2.	2.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT							
	A18	.01	1	FLOW	14.	27.	27.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT							
	A19	.01	1	FLOW	10.	22.	23.
				TIME	3.58	3.58	3.58
5 COMBINED AT							
	CA3	.07	1	FLOW	69.	140.	142.
				TIME	3.50	3.50	3.50
ROUTED TO							
	R/CA3	.07	1	FLOW	69.	137.	139.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT							
	A20	.00	1	FLOW	3.	6.	6.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT							
	A21AM	.00	1	FLOW	3.	6.	6.
				TIME	3.58	3.58	3.58
2 COMBINED AT							
	COM2	.01	1	FLOW	6.	13.	13.
				TIME	3.58	3.58	3.58
ROUTED TO							
	R/CON	.01	1	FLOW	6.	12.	12.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT							
	A21B	.00	1	FLOW	5.	9.	10.
				TIME	3.50	3.50	3.50
3 COMBINED AT							
	CA4B	.09	1	FLOW	80.	158.	160.
				TIME	3.58	3.58	3.58

2 COMBINED AT	CA4	.27	1	FLOW	267.	514.	520.
				TIME	3.58	3.58	3.58
ROUTED TO	R/CA4	.27	1	FLOW	266.	512.	515.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A22	.02	1	FLOW	22.	42.	42.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A23	.01	1	FLOW	8.	15.	15.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A21AB	.00	1	FLOW	3.	7.	7.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A36	.00	1	FLOW	2.	3.	3.
				TIME	3.50	3.50	3.50
3 COMBINED AT	COM3	.01	1	FLOW	13.	25.	25.
				TIME	3.50	3.50	3.50
ROUTED TO	R/COM	.01	1	FLOW	12.	24.	24.
				TIME	3.58	3.50	3.50
HYDROGRAPH AT	A24	.00	1	FLOW	1.	3.	3.
				TIME	3.50	3.50	3.50
2 COMBINED AT	COM2	.01	1	FLOW	13.	26.	27.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A25A	.01	1	FLOW	4.	12.	13.
				TIME	3.50	3.50	3.50
4 COMBINED AT	CA5	.31	1	FLOW	302.	584.	591.
				TIME	3.58	3.58	3.58
ROUTED TO	DET	.31	1	FLOW	183.	231.	248.
				TIME	3.75	3.92	3.83
			** PEAK STAGES IN FEET **				
			1	STAGE	42.12	46.10	46.16
				TIME	3.75	3.92	3.83
HYDROGRAPH AT	A10AB	.00	1	FLOW	3.	5.	5.
				TIME	3.50	3.50	3.50
ROUTED TO	RA10AB	.00	1	FLOW	2.	5.	5.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A30A	.00	1	FLOW	2.	4.	4.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A30B	.00	1	FLOW	2.	3.	4.
				TIME	3.50	3.50	3.50
2 COMBINED AT	COM30	.00	1	FLOW	4.	7.	7.
				TIME	3.50	3.50	3.50
DIVERSION TO	A30S	.00	1	FLOW	2.	4.	4.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	DIV	.00	1	FLOW	2.	4.	6.
				TIME	3.50	3.50	3.50
2 COMBINED AT	COMDI	.01	1	FLOW	4.	8.	8.
				TIME	3.50	3.50	3.50
DIVERSION TO	DIND	.01	1	FLOW	0.	2.	2.

				TIME	.00	3.50	3.50
HYDROGRAPH AT	DI	.01	1	FLOW	4.	6.	6.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A28-9	.03	1	FLOW	30.	57.	57.
				TIME	3.58	3.58	3.58
DIVERSION TO	D36	.03	1	FLOW	19.	32.	32.
				TIME	3.58	3.50	3.50
HYDROGRAPH AT	D24	.03	1	FLOW	13.	25.	25.
				TIME	3.58	3.58	3.58
2 COMBINED AT	COM3	.03	1	FLOW	35.	30.	30.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	A25B	.00	1	FLOW	3.	6.	6.
				TIME	3.50	3.50	3.50
2 COMBINED AT	COM2	.04	1	FLOW	38.	34.	35.
				TIME	3.50	3.50	3.50
ROUTED TO	R/SD	.04	1	FLOW	18.	34.	34.
				TIME	3.50	3.58	3.50
HYDROGRAPH AT	RA30S	.00	1	FLOW	2.	4.	4.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A31	.00	1	FLOW	2.	3.	4.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A27	.00	1	FLOW	3.	7.	7.
				TIME	3.58	3.58	3.58
3 COMBINED AT	CA6S	.00	1	FLOW	7.	13.	14.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A26	.03	1	FLOW	21.	46.	47.
				TIME	3.58	3.58	3.58
ROUTED TO	RSD	.03	1	FLOW	21.	46.	47.
				TIME	3.58	3.58	3.58
2 COMBINED AT	CA6SP	.03	1	FLOW	26.	56.	57.
				TIME	3.58	3.58	3.58
3 COMBINED AT	CA6	.38	1	FLOW	218.	299.	301.
				TIME	3.58	3.58	3.58
HYDROGRAPH AT	RDIND	.00	1	FLOW	0.	2.	2.
				TIME	.00	1.50	1.50
HYDROGRAPH AT	A32	.00	1	FLOW	3.	5.	5.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	CH2	.00	1	FLOW	6.	10.	10.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	A33	.00	1	FLOW	2.	5.	5.
				TIME	3.50	3.50	3.50
4 COMBINED AT	CA7S	.01	1	FLOW	11.	22.	22.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	RD36	.00	1	FLOW	19.	32.	32.
				TIME	3.58	3.50	3.50

PORTION OF CHANCELLOR BOULEVARD THAT DRAINS SOUTH INTO INDIGO DRIVE

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 2 COMBINED AT
                    CA7       .01     1   FLOW          28.     54.     54.
                                          TIME        3.50    3.50    3.50

 2 COMBINED AT
                    PT.A      .39     1   FLOW         244.    346.    349.
                                          TIME        3.58    3.58    3.58

 HYDROGRAPH AT
                    A34       .01     1   FLOW           8.     15.     16.
                                          TIME        3.50    3.50    3.50

 HYDROGRAPH AT
                    A35       .01     1   FLOW          10.     17.     17.
                                          TIME        3.50    3.50    3.50

 HYDROGRAPH AT
                    B43       .00     1   FLOW           4.      7.      7.
                                          TIME        3.50    3.50    3.50
1
                                  SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                     (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                    INTERPOLATED TO
                                                                    COMPUTATION INTERVAL
          ISTAQ   ELEMENT      DT       PEAK    TIME TO     VOLUME     DT       PEAK    TIME TO     VOLUME
                                                  PEAK                                    PEAK
                               (MIN)    (CFS)    (MIN)      (IN)     (MIN)     (CFS)    (MIN)      (IN)
      FOR PLAN = 1  RATIO= .00
         R/CA1  MANE          2.09     66.43    217.57     1.29      5.00     65.74    215.00     1.29

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .4606E+01 EXCESS= .0000E+00 OUTFLOW= .4606E+01 BASIN STORAGE= .2256E-03 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/CA1  MANE          1.84    126.37    217.26     2.57      5.00    125.24    215.00     2.56

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .9169E+01 EXCESS= .0000E+00 OUTFLOW= .9169E+01 BASIN STORAGE= .2160E-03 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/CA1  MANE          1.84    128.75    216.78     2.60      5.00    127.00    215.00     2.60

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .9278E+01 EXCESS= .0000E+00 OUTFLOW= .9278E+01 BASIN STORAGE= .1917E-03 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/A7   MANE          1.05     16.56    211.51     1.29      5.00     16.51    215.00     1.29

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1074E+01 EXCESS= .0000E+00 OUTFLOW= .1074E+01 BASIN STORAGE= .7092E-04 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/A7   MANE           .92     31.59    211.69     2.57      5.00     31.11    215.00     2.57

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2138E+01 EXCESS= .0000E+00 OUTFLOW= .2138E+01 BASIN STORAGE= .7693E-04 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/A7   MANE           .92     31.86    211.22     2.60      5.00     31.47    215.00     2.60

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2164E+01 EXCESS= .0000E+00 OUTFLOW= .2164E+01 BASIN STORAGE= .7673E-04 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/CA2  MANE           .98    153.64    215.31     1.29      5.00    153.21    215.00     1.29

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1053E+02 EXCESS= .0000E+00 OUTFLOW= .1052E+02 BASIN STORAGE= .1018E-03 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/CA2  MANE           .86    291.47    215.35     2.56      5.00    291.03    215.00     2.57

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2095E+02 EXCESS= .0000E+00 OUTFLOW= .2094E+02 BASIN STORAGE= .1097E-03 PERCENT ERROR=    .0

      FOR PLAN = 1  RATIO= .00
         R/CA2  MANE           .86    295.19    214.82     2.59      5.00    294.96    215.00     2.60

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2120E+02 EXCESS= .0000E+00 OUTFLOW= .2119E+02 BASIN STORAGE= .1124E-03 PERCENT ERROR=    .0
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CONTINUITY SUMMARY (AC-FT) - INFLOW= .1653E+01 EXCESS= .0000E+00 OUTFLOW= .[illegible]E+01 BASIN STORAGE= .7751E-04 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R/COM	MANE	1.04	24.70	211.52	2.60	5.00	23.78	210.00	2.60

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1672E+01 EXCESS= .0000E+00 OUTFLOW= .1672E+01 BASIN STORAGE= .7586E-04 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RA1CAR	MANE	3.50	2.51	217.00	1.29	5.00	2.47	215.00	1.29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1569E+00 EXCESS= .0000E+00 OUTFLOW= .1571E+00 BASIN STORAGE= .5178E-03 PERCENT ERROR= -.5

FOR PLAN = 1 RATIO= .00

RA1CAR	MANE	3.00	4.72	213.00	2.57	5.00	4.72	215.00	2.56

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3121E+00 EXCESS= .0000E+00 OUTFLOW= .3125E+00 BASIN STORAGE= .4845E-03 PERCENT ERROR= -.3

FOR PLAN = 1 RATIO= .00

RA1CAR	MANE	3.00	4.77	213.00	2.60	5.00	4.77	215.00	2.59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3159E+00 EXCESS= .0000E+00 OUTFLOW= .3163E+00 BASIN STORAGE= .4877E-03 PERCENT ERROR= -.3

FOR PLAN = 1 RATIO= .00

R/SD	MANE	.23	18.07	210.23	.67	5.00	17.92	210.00	.67

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1303E+01 EXCESS= .0000E+00 OUTFLOW= .1303E+01 BASIN STORAGE= .1561E-04 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R/SD	MANE	.20	33.97	210.39	1.31	5.00	33.67	215.00	1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2529E+01 EXCESS= .0000E+00 OUTFLOW= .2529E+01 BASIN STORAGE= .1548E-04 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R/SD	MANE	.20	34.71	210.44	1.33	5.00	34.37	210.00	1.33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2562E+01 EXCESS= .0000E+00 OUTFLOW= .2562E+01 BASIN STORAGE= .1548E-04 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RSD	MANE	.45	21.29	215.47	.92	5.00	21.15	215.00	.92

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1322E+01 EXCESS= .0000E+00 OUTFLOW= .1322E+01 BASIN STORAGE= .3319E-04 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RSD	MANE	.39	46.18	215.39	2.09	5.00	46.04	215.00	2.09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3001E+01 EXCESS= .0000E+00 OUTFLOW= .3001E+01 BASIN STORAGE= .3258E-04 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RSD	MANE	.38	46.73	215.22	2.12	5.00	46.59	215.00	2.12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3043E+01 EXCESS= .0000E+00 OUTFLOW= .3043E+01 BASIN STORAGE= .3216E-04 PERCENT ERROR= .0

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