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SPENCER, N.C.

WALTON BRANCH

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MADE IN U.S.A.

PROGRAMMER	REMARK	ACCOUNT	TIME USED	INCLUDES	MISC. JOB VALUES
PROGRAMMER	REMARK	ACCOUNT=RTI.A25.P03078			
JOB TURN-AROUND	JOB PARAMETERS				
DATE	TIME	SPECIFIED	USED	NO. EQUIVALENT	
ENTERED 10/06/77	15:58:10.6	TIME 2:00.0	0:19.4	CPU 0:06.5	LINES IN 130
EXECUTED 10/06/77	18:50:21.1	PAGES 200	15	UR EXCPS 937	0:03.8
RETURNED 10/07/77	12:34:10.7	CARDS 0	0	DISK EXCPS 456	0:09.1
JOB ENTERED ON THURSDAY	PLOTS 0	0	0	TAPE READ-WRITE	0:00.0
				TAPE FILE SEARCH	0:00.0
					PRIORITY 00
					APPROX. COST 34.08

JOB CONSOLE LOG

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N 18.50.18 JOB 366 -- RMAKS2 -- JCL INTERPRETED, TUCC CPU R2
N 18.50.20 JOB 366 -- RMAKS2 -- BEGINNING EXEC - INIT 2 - CLASS
L*18.50.21 JOB 366 +++++S=068.T=02.J=RMAKS2 18:50:21 MAK
N 18.51.00 JOB 366 END EXECUTION.

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//RMAKS2 JOB FTI.A25.P03078,MAK,M=1,T=2,P=200,PRTY=0

\*\*\*PROCLYB=RTI.MB.PROCLYB

// EXEC RECF

XXG EXEC PGM=RECF,R=500X	00000010
XXSTEPLIB DD DSN=RTI.A25.P03078.JCW.LIB.LOAD,DISP=SHR	00000020
XXFT03F001 DD SYSOUT=A	00000030
XXFT01F001 DD DDNAME=SYSIN	00000040
XXFT91F001 DD DSN=8191,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000050
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000060
XXFT92F001 DD DSN=8192,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000070
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000080
XXFT93F001 DD DSN=8193,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000090
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000100
XXFT94F001 DD DSN=8194,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000110
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000120
XXFT95F001 DD DSN=8195,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000130
XX DCB=(BUFNO=1,RECFM=VBS,LRECL=1000,BLKSIZE=6400)	00000140
XXFT96F001 DD DSN=8196,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000150
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000160

//SYSIN DD \*

//

IEF236I ALLOC. FOR RMAKS2 6

IEF237I 177 ALLOCATED TO STEPLIB

IEF237I 561 ALLOCATED TO FT03F001

IEF237I 501 ALLOCATED TO FT01F001

IEF237I 150 ALLOCATED TO FT91F001

IEF237I 150 ALLOCATED TO FT92F001

IEF237I 150 ALLOCATED TO FT93F001

IEF237I 150 ALLOCATED TO FT94F001

IEF237I 150 ALLOCATED TO FT95F001

IEF237I 150 ALLOCATED TO FT96F001

IEF142I - STEP WAS EXECUTED - COND CODE 0000

IEF205I RTI.A25.P03078.JCW.LIB.LOAD KEPT

IEF205I VOL SER NOS= RTI444.

IEF205I SYS77279.T185018.RV001.RMAKS2.191 DELETED

IEF205I VOL SER NOS= SPARE7.

IEF205I SYS77279.T185018.RV001.RMAKS2.192 DELETED

IEF205I VOL SER NOS= SPARE7.

IEF205I SYS77279.T185018.RV001.RMAKS2.193 DELETED

IEF205I VOL SER NOS= SPARE7.

IEF205I SYS77279.T185018.RV001.RMAKS2.194 DELETED

IEF205I VOL SER NOS= SPARE7.

IEF205I SYS77279.T185018.RV001.RMAKS2.195 DELETED

IEF205I VOL SER NOS= SPARE7.

IEF205I SYS77279.T185018.RV001.RMAKS2.196 DELETED

IEF205I VOL SER NOS= SPARE7.

COND=500K TIME=0117.7 UR=885 RDWR=0100.0 RC=

PS=234K CPU=0106.5 DISK=427 REWD=0100.0

I/O=0111.2 TAPE=0 FL SR=0100.0

RMAKS2 TIME=0117.7

\*\*\*\*\*  
 HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977  
 ERROR CORR - 01  
 MODIFICATION - 50,51,52  
 \*\*\*\*\*

T1 SPENCER-ROWAN CO. BASIN E STRM 25 WALTON BRANCH  
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-6 JOB NO. 691A  
 T3 10 YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INQ NINW IDIR STRY METRIC HVINS Q WSEL FD  
 -1. 2. 0. 0. 0.019500 0.0 0.0 0. 650,000 0.0

J2 NPROF IPILOT PRFVS XSECV XSECH FN ALLOC IBW CHNIM ITRACE  
 0.0 0.0 -1,000 0.0 0.0 0.0 0.0 0.0 0.0 0.0

J3 VARIABLE CODES FOR SUMMARY PRINTOUT  
 38,000 39,000 40,000 41,000 43,000 42,000 1,000 2,000 26,000 53,000

54,000 25,000 50,000 0.0 201,000 0.0 0.0 0.0 0.0 0.0

J5 LPRINT QUNSEC \*\*\*\*\*REQUESTED SECTION NUMBERS\*\*\*\*\*

-10,000 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0  
 NC 0.055 0.055 0.035 0.100 0.300 0.0 0.0 0.0 0.0 0.0  
 DT 5,000 235,000 447,000 562,000 849,000 562,000 0.0 0.0 0.0 0.0  
 ET 5,000 0.0 0.0 0.0 0.0 0.0 -10,400 0.0 0.0 0.0

X1 275,000 11,000 1249,000 1266,000 275,000 275,000 275,000 0.0 0.0 0.0  
 GR 665,800 1000,000 659,100 1100,000 651,200 1200,000 650,500 1249,000 645,700 1251,000  
 GR 645,500 1256,000 645,800 1260,000 649,400 1266,000 650,500 1283,000 652,600 1300,000  
 GR 665,800 1369,000 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0  
 DT 5,000 186,000 359,000 456,000 699,000 456,000 0.0 0.0 0.0 0.0

X1 1125,000 10,000 1157,000 1173,000 850,000 850,000 850,000 0.0 -2,900 0.0  
 GR 623,300 1000,000 667,500 1100,000 666,600 1124,000 666,500 1157,000 661,100 1162,000  
 GR 651,200 1168,000 666,300 1173,000 667,600 1200,000 668,000 1300,000 683,300 1360,000

X1 1175,000 0.0 0.0 0.0 50,000 50,000 50,000 0.0 0.600 0.0  
 NC 0.025 0.025 0.025 0.100 0.300 0.0 0.0 0.0 0.0 0.0

X1 1225,000 17,000 1265,000 1239,000 50,000 50,000 50,000 0.0 0.0 0.0  
 GR 667,100 1000,000 662,000 1100,000 660,000 1132,000 665,800 1222,000 664,900 1246,000  
 GR 665,800 1279,000 661,000 1285,000 659,700 1286,000 659,400 1287,000 659,700 1288,000  
 GR 661,400 1289,000 664,900 1322,000 666,300 1422,000 679,800 1475,000 681,500 1500,000  
 GR 665,800 1600,000 667,100 1618,000 0.0 0.0 0.0 0.0 0.0 0.0  
 SD 0.900 1.500 2.500 0.0 4,000 0.010 12,600 0.0 0.0 0.0

X1 1295,000 0.0 0.0 0.0 71,000 71,000 71,000 0.0 0.0 0.0

GR	686,800	1600,000	687,100	1618,000	0,0	0,0	0,0	0,0	0,0	0,0
SB	0,900	1,500	2,500	0,0	4,000	0,010	12,600	0,0	0,0	0,0

X1	1295,000	0,0	0,0	0,0	71,000	71,000	71,000	0,0	0,0	0,0
X2	0,0	0,0	1,000	663,400	671,800	0,0	0,0	0,0	0,0	0,0
BT	13,000	1000,000	687,100	0,0	1100,000	682,000	0,0	1200,000	675,700	0,0
BT	1285,000	672,000	661,400	1286,000	672,000	663,100	1287,000	672,000	663,400	1288,000
BT	672,000	663,100	1289,000	672,000	661,400	1300,000	671,8	0,0	1400,000	674,500
BT	0,0	1500,000	661,500	0,0	1600,000	686,800	0,0	1618,000	687,100	0,0
NC	0,055	0,055	0,055	0,100	0,300	0,0	0,0	0,0	0,0	0,0

X1	1346,000	10,000	1157,000	1173,000	50,000	50,000	50,000	0,0	-0,600	0,0
GR	653,300	1000,000	667,500	1100,000	666,500	1124,000	666,500	1157,000	661,100	1162,000
GR	651,200	1168,000	666,300	1173,000	667,500	1200,000	668,000	1300,000	683,300	1360,000

X1	1395,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	0,600	0,0
BT	5,000	104,000	213,000	279,000	450,000	279,000	0,0	0,0	0,0	0,0

X1	2365,000	9,000	1125,000	1133,000	969,000	969,000	969,000	0,0	-9,700	0,0
GR	704,600	1000,000	688,800	1100,000	686,100	1125,000	683,900	1127,000	683,900	1129,000
GR	687,200	1133,000	690,800	1200,000	701,900	1300,000	704,600	1334,000	0,0	0,0

X1	2415,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	1,600	0,0
NC	0,025	0,025	0,025	0,100	0,300	0,0	0,0	0,0	0,0	0,0

X1	2465,000	18,000	1434,000	1436,000	50,000	50,000	50,000	0,0	0,0	0,0
GR	700,100	1000,000	695,700	1080,000	695,300	1100,000	690,100	1200,000	685,900	1300,000
GR	684,900	1392,000	682,300	1407,000	679,600	1432,000	678,400	1434,000	677,600	1434,500
GR	677,400	1435,000	677,600	1435,500	678,400	1436,000	680,700	1440,000	684,300	1507,000
GR	690,700	1567,000	692,200	1600,000	700,100	1692,000	0,0	0,0	0,0	0,0
SB	0,900	1,500	2,500	0,0	2,000	0,010	3,100	0,0	0,0	0,0

X1	2554,000	0,0	0,0	0,0	89,000	89,000	89,000	0,0	0,0	0,0
X2	0,0	0,0	1,000	679,400	685,000	0,0	0,0	0,0	0,0	0,0
BT	14,000	1000,000	700,100	0,0	1080,000	695,700	0,0	1100,000	695,300	0,0
BT	1200,000	690,100	0,0	1300,000	685,900	0,0	1400,000	685,000	0,0	1434,000
BT	685,700	678,400	1434,500	685,700	679,200	1435,000	685,700	679,400	1435,500	685,700
BT	679,200	1436,000	685,700	678,400	1500,000	687,700	0,0	1600,000	692,200	0,0
BT	1692,000	700,100	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
NC	0,055	0,055	0,055	0,100	0,300	0,0	0,0	0,0	0,0	0,0

X1	2694,000	9,000	1125,000	1133,000	50,000	50,000	50,000	0,0	-1,600	0,0
GR	704,500	1000,000	688,800	1100,000	686,100	1125,000	683,900	1127,000	683,900	1129,000
GR	687,200	1133,000	690,800	1200,000	701,900	1300,000	704,600	1334,000	0,0	0,0

X1	2654,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	1,600	0,0
BT	3,000	81,000	170,000	224,000	370,000	224,000	0,0	0,0	0,0	0,0

X1	2960,000	10,000	1155,000	1160,000	291,000	291,000	291,000	0,0	-10,100	0,0
GR	722,000	1000,000	711,400	1050,000	706,700	1125,000	703,300	1155,000	702,100	1157,000
GR	702,100	1158,000	764,500	1160,000	710,400	1200,000	716,800	1300,000	722,000	1385,000

X1	3010,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	3,300	0,0
NC	0,025	0,025	0,025	0,100	0,300	0,0	0,0	0,0	0,0	0,0

X1	3050,000	16,000	1244,700	1247,300	50,000	50,000	50,000	0,0	0,0	0,0
GR	723,300	1000,000	716,200	1100,500	706,100	1138,000	703,400	1213,000	700,100	1244,700
GR	699,300	1245,000	698,000	1246,000	699,300	1247,000	700,100	1247,300	701,200	1248,000



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HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977

ERROR CORR - 01

MODIFICATION - 50,51,52

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T1 SPENCER-FOWAN CO. BASIN 2 STRR 2S WALTOM BRANCH  
T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918  
T3 50 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.019500	0.0	0.0	0.	651.000	0.0

J2	WPROF	IPLGT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
	2.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0







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 HEC2 RELEASE DATED NOV. 76 UPDATED FEB. 1977  
 ERROR CORR - 01  
 MODIFICATION - 50,51,52  
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NOTE- ASTERISK (\*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

10 YEAR FLOOD WATER SURF

SUMMARY PRINTOUT

	SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
*	275.000	275.00	0.0	0.0	235.00	645.50	648.17	648.17	8.15	1249.97	1263.94	28.84	0.0
*	275.000	275.00	0.0	0.0	447.00	645.50	649.32	649.32	9.65	1249.49	1265.86	46.30	1.15
* A	275.000	275.00	0.0	0.0	562.00	645.50	649.93	649.93	9.90	1249.24	1274.17	58.61	0.61
*	275.000	275.00	0.0	0.0	849.00	645.50	651.49	651.49	8.60	1196.26	1291.06	145.45	1.57
	1125.000	850.00	0.0	0.0	186.00	658.20	661.19	0.0	7.19	1159.23	1170.83	25.85	0.0
	1125.000	850.00	0.0	0.0	359.00	658.20	662.40	0.0	8.71	1158.12	1172.01	41.23	1.21
* B	1125.000	850.00	0.0	0.0	456.00	658.20	662.71	662.68	9.96	1157.82	1172.33	45.78	0.31
*	1125.000	850.00	0.0	0.0	699.00	658.20	664.54	664.54	8.17	1101.68	1196.62	126.41	1.83
	1175.000	50.00	0.0	0.0	186.00	658.80	661.85	0.0	6.98	1159.17	1170.90	26.64	0.0
	1175.000	50.00	0.0	0.0	359.00	658.80	663.15	0.0	8.27	1157.97	1172.17	43.40	1.30
	1175.000	50.00	0.0	0.0	456.00	658.80	663.80	0.0	8.60	1157.37	1172.80	53.05	0.66
*	1175.000	50.00	0.0	0.0	699.00	658.80	665.14	665.14	8.15	1101.53	1196.74	126.94	1.34
*	1225.000	50.00	0.0	0.0	186.00	659.40	663.28	663.28	7.82	1282.43	1306.77	32.11	0.0
*	1225.000	50.00	0.0	0.0	359.00	659.40	664.04	664.04	9.15	1281.40	1313.92	53.68	0.76
	1225.000	50.00	0.0	0.0	456.00	659.40	664.70	0.0	8.07	1280.50	1320.10	77.29	0.66
	1225.000	50.00	0.0	0.0	699.00	659.40	666.04	0.0	5.21	1220.52	1402.95	218.67	1.34
	1296.000	71.00	671.80	663.40	186.00	659.40	668.36	0.0	0.36	1205.77	1430.09	710.51	0.0
	1296.000	71.00	671.80	663.40	359.00	659.40	673.00	0.0	0.22	1176.37	1448.30	1861.74	4.64
	1296.000	71.00	671.80	663.40	456.00	659.40	673.39	0.0	0.26	1173.91	1449.83	1967.94	0.39
	1296.000	71.00	671.80	663.40	699.00	659.40	674.01	0.0	0.36	1169.97	1452.27	2141.49	0.62
	1346.000	50.00	0.0	0.0	186.00	660.50	668.35	0.0	0.95	1090.79	1303.74	401.80	0.0
	1346.000	50.00	0.0	0.0	359.00	660.50	673.00	0.0	0.43	1061.40	1321.96	1501.42	4.64
	1346.000	50.00	0.0	0.0	456.00	660.50	673.39	0.0	0.51	1058.95	1323.48	1603.01	0.39
	1346.000	50.00	0.0	0.0	699.00	660.50	674.01	0.0	0.70	1055.02	1325.91	1769.15	0.62
	1396.000	50.00	0.0	0.0	186.00	661.10	668.35	0.0	1.33	1094.58	1301.40	276.21	0.0
	1396.000	50.00	0.0	0.0	359.00	661.10	673.00	0.0	0.49	1065.20	1319.60	1346.90	4.65
* C	1396.000	50.00	0.0	0.0	456.00	661.10	673.39	0.0	0.57	1062.74	1321.12	1446.18	0.39
	1396.000	50.00	0.0	0.0	699.00	661.10	674.01	0.0	0.78	1058.81	1323.56	1608.57	0.62
*	2355.000	969.00	0.0	0.0	104.00	674.20	677.07	677.07	7.05	1118.80	1132.48	16.35	0.0
*	2355.000	969.00	0.0	0.0	213.00	674.20	678.15	678.15	7.52	1108.76	1145.13	40.97	1.08
* D	2355.000	969.00	0.0	0.0	279.00	674.20	678.55	678.55	7.75	1105.04	1152.64	57.91	0.40
*	2355.000	969.00	0.0	0.0	450.00	674.20	679.28	679.28	8.19	1098.87	1166.10	99.58	0.72

* D	2365.000	969.00	0.0	0.0	279.00	674.20	678.55	678.55	7.75	1105.04	1152.64	57.91	0.40
*	2365.000	969.00	0.0	0.0	450.00	674.20	679.28	679.28	8.19	1098.87	1166.10	99.58	0.72

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
* 2415.000	50.00	0.0	0.0	104.00	675.80	678.67	678.67	7.04	1118.77	1132.48	16.39	0.0
* 2415.000	50.00	0.0	0.0	213.00	675.80	679.75	679.75	7.52	1108.78	1145.13	40.98	1.08
* 2415.000	50.00	0.0	0.0	279.00	675.80	680.13	680.13	7.82	1105.29	1152.14	56.64	0.38
* 2415.000	50.00	0.0	0.0	450.00	675.80	680.78	680.78	8.71	1099.52	1164.20	92.84	0.65
* 2465.000	50.00	0.0	0.0	104.00	677.40	680.72	680.72	7.31	1421.60	1440.44	19.94	0.0
* 2465.000	50.00	0.0	0.0	213.00	677.40	681.44	681.44	7.93	1414.99	1453.72	40.49	0.71
* 2465.000	50.00	0.0	0.0	279.00	677.40	681.63	681.63	8.82	1413.22	1457.28	48.40	0.19
* 2465.000	50.00	0.0	0.0	450.00	677.40	682.20	682.20	9.04	1407.96	1467.84	77.90	0.57
2554.000	89.00	685.00	679.40	104.00	677.40	685.70	0.0	0.31	1317.99	1520.17	458.08	0.0
2554.000	89.00	685.00	679.40	213.00	677.40	686.05	0.0	0.54	1296.33	1523.44	534.15	0.35
2554.000	89.00	685.00	679.40	279.00	677.40	686.20	0.0	0.67	1292.86	1524.81	567.60	0.14
2554.000	89.00	685.00	679.40	450.00	677.40	686.51	0.0	0.96	1285.37	1527.76	642.18	0.31
2604.000	50.00	0.0	0.0	104.00	682.30	685.21	685.17	6.86	1118.40	1132.53	16.95	0.0
* 2604.000	50.00	0.0	0.0	213.00	682.30	686.25	686.25	7.53	1108.80	1145.09	40.89	1.04
* 2604.000	50.00	0.0	0.0	279.00	682.30	686.61	686.61	7.96	1105.45	1151.81	55.82	0.36
* 2604.000	50.00	0.0	0.0	450.00	682.30	687.32	687.32	8.50	1099.26	1164.95	95.46	0.71
* 2654.000	50.00	0.0	0.0	104.00	683.90	686.76	686.76	7.07	1118.85	1132.47	16.27	0.0
* 2654.000	50.00	0.0	0.0	213.00	683.90	687.85	687.85	7.52	1108.78	1145.14	40.99	1.09
* E 2654.000	50.00	0.0	0.0	279.00	683.90	688.24	688.24	7.81	1105.15	1152.40	57.30	0.39
* 2654.000	50.00	0.0	0.0	450.00	683.90	688.91	688.91	8.52	1099.28	1164.89	95.27	0.67
* 2960.000	291.00	0.0	0.0	81.00	692.00	694.54	694.54	6.68	1143.20	1160.93	17.04	0.0
* F 2960.000	291.00	0.0	0.0	170.00	692.00	695.29	695.29	7.92	1136.53	1166.05	34.90	0.76
* 2960.000	291.00	0.0	0.0	224.00	692.00	695.62	695.62	8.39	1133.63	1168.28	45.43	0.33
* 2960.000	291.00	0.0	0.0	370.00	692.00	696.26	696.26	9.49	1128.02	1172.59	70.61	0.64
* 3010.000	50.00	0.0	0.0	81.00	695.30	697.84	697.84	6.66	1143.18	1160.95	17.09	0.0
* 3010.000	50.00	0.0	0.0	170.00	695.30	698.60	698.60	7.87	1136.46	1166.11	35.14	0.76
* 3010.000	50.00	0.0	0.0	224.00	695.30	698.90	698.90	8.48	1133.78	1168.16	44.84	0.30
* 3010.000	50.00	0.0	0.0	370.00	695.30	699.49	699.49	9.84	1128.59	1172.15	67.77	0.59
* 3060.000	50.00	0.0	0.0	81.00	698.80	701.53	701.53	6.59	1230.96	1250.24	16.86	0.0
* 3060.000	50.00	0.0	0.0	170.00	698.80	702.15	702.15	7.51	1224.98	1254.46	32.06	0.62
* G 3060.000	50.00	0.0	0.0	224.00	698.80	702.38	702.38	8.10	1222.76	1256.03	39.31	0.23
* 3060.000	50.00	0.0	0.0	370.00	698.80	702.95	702.95	8.63	1217.32	1259.87	60.78	0.57
3120.000	60.00	707.60	701.30	81.00	698.80	707.75	0.0	0.20	1143.63	1297.62	515.15	0.0
3120.000	60.00	707.60	701.30	170.00	698.80	708.60	0.0	0.32	1135.64	1310.79	656.98	0.85
H 3120.000	60.00	707.60	701.30	224.00	698.80	708.81	0.0	0.39	1134.65	1314.00	694.45	0.21
3120.000	60.00	707.60	701.30	370.00	698.80	709.22	0.0	0.58	1132.71	1320.29	770.55	0.41
3170.000	50.00	0.0	0.0	81.00	702.10	707.74	0.0	1.00	1108.37	1181.98	151.16	0.0
3170.000	50.00	0.0	0.0	170.00	702.10	708.59	0.0	1.47	1094.80	1187.75	222.00	0.85
3170.000	50.00	0.0	0.0	224.00	702.10	709.80	0.0	1.79	1091.49	1189.15	241.75	0.21
3170.000	50.00	0.0	0.0	370.00	702.10	709.20	0.0	2.55	1085.08	1191.87	282.80	0.40
3220.000	50.00	0.0	0.0	81.00	702.30	707.75	0.0	1.10	1111.53	1180.64	137.05	0.0
3220.000	50.00	0.0	0.0	170.00	702.30	708.60	0.0	1.59	1097.92	1186.42	204.23	0.85
I 3220.000	50.00	0.0	0.0	224.00	702.30	708.81	0.0	1.93	1094.59	1187.83	223.20	0.21
3220.000	50.00	0.0	0.0	370.00	702.30	709.22	0.0	2.73	1088.11	1190.59	262.98	0.41

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
3260.000	40.00	0.0	0.0	81.00	702.50	707.75	0.0	1.21	1114.63	1179.32	124.06	0.0
3260.000	40.00	0.0	0.0	170.00	702.50	708.61	0.0	1.72	1100.95	1185.13	187.83	0.86
3260.000	40.00	0.0	0.0	224.00	702.50	708.82	0.0	2.07	1097.55	1186.58	206.29	0.21
3260.000	40.00	0.0	0.0	370.00	702.50	709.24	0.0	2.92	1090.87	1189.41	245.56	0.42
3310.000	50.00	0.0	0.0	81.00	702.60	707.76	0.0	1.27	1116.12	1178.69	118.11	0.0
3310.000	50.00	0.0	0.0	170.00	702.60	708.62	0.0	1.79	1102.38	1184.52	180.40	0.86
3310.000	50.00	0.0	0.0	224.00	702.60	708.83	0.0	2.15	1098.92	1186.00	198.76	0.22
3310.000	50.00	0.0	0.0	370.00	702.60	709.27	0.0	2.99	1092.04	1188.92	238.38	0.43
* 3360.000	50.00	0.0	0.0	81.00	707.90	710.42	710.42	6.86	1130.37	1147.82	15.81	0.0
* 3360.000	50.00	0.0	0.0	170.00	707.90	711.02	711.02	7.95	1125.04	1151.99	29.22	0.60
* 3360.000	50.00	0.0	0.0	224.00	707.90	711.30	711.30	8.28	1122.61	1153.88	37.22	0.27
* 3360.000	50.00	0.0	0.0	370.00	707.90	711.82	711.82	9.14	1117.96	1157.52	55.90	0.53
3512.000	152.00	711.70	709.20	81.00	707.90	713.19	0.0	0.84	1100.85	1166.99	126.84	0.0
3512.000	152.00	711.70	709.20	170.00	707.90	713.77	0.0	1.28	1091.59	1177.06	170.84	0.58
3512.000	152.00	711.70	709.20	224.00	707.90	714.02	0.0	1.50	1087.72	1181.27	192.51	0.25
3512.000	152.00	711.70	709.20	370.00	707.90	714.56	0.0	1.92	1079.13	1190.63	247.75	0.54
3562.000	50.00	0.0	0.0	81.00	708.10	713.19	0.0	1.31	1117.16	1178.25	114.08	0.0
3562.000	50.00	0.0	0.0	170.00	708.10	713.77	0.0	2.08	1107.94	1182.16	153.16	0.58
3562.000	50.00	0.0	0.0	224.00	708.10	714.02	0.0	2.45	1103.96	1183.85	172.37	0.25
3562.000	50.00	0.0	0.0	370.00	708.10	714.55	0.0	3.25	1095.42	1187.48	218.39	0.53
3612.000	50.00	0.0	0.0	81.00	708.30	713.20	0.0	1.46	1120.26	1176.93	102.64	0.0
3612.000	50.00	0.0	0.0	170.00	708.30	713.79	0.0	2.27	1110.94	1180.89	139.61	0.59
3612.000	50.00	0.0	0.0	224.00	708.30	714.04	0.0	2.66	1106.91	1182.60	157.99	0.25
3612.000	50.00	0.0	0.0	370.00	708.30	714.59	0.0	3.48	1098.15	1186.32	202.98	0.55

SUMMARY OF ERRORS

CAUTION SECNO= 275.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 275.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 275.000 PROFILE= 3 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 275.000 PROFILE= 4 CRITICAL DEPTH ASSUMED  
  
CAUTION SECNO= 1125.000 PROFILE= 4 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 1125.000 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 1125.000 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL  
  
CAUTION SECNO= 1175.000 PROFILE= 4 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 1175.000 PROFILE= 4 MINIMUM SPECIFIC ENERGY  
  
CAUTION SECNO= 1225.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 1225.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 1225.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 1225.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 1225.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 1225.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL  
  
CAUTION SECNO= 2365.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2365.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2365.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 2365.000 PROFILE= 2 CRITICAL DEPTH ASSUMED



CAUTION SECNO= 2960.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 2960.000 PROFILE= 3 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2960.000 PROFILE= 3 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2960.000 PROFILE= 3 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 2960.000 PROFILE= 4 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2960.000 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2960.000 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3010.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3010.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3010.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3010.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3010.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3010.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3010.000 PROFILE= 3 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3010.000 PROFILE= 3 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3010.000 PROFILE= 3 20 TRIALS ATTEMPTED TO BALANCE WSEL  
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CAUTION SECNO= 3010.000 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3060.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3060.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3060.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3060.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
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CAUTION SECNO= 3360.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
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CAUTION SECNO= 3360.000 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3360.000 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

FLOOD INSURANCE ZONE DATA FOR 10 YEAR FLOOD WATER SURF

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND		
		10f	2f	0.2f
275.000	0.	-1.6	-0.6	1.6
1125.000	850.	-1.5	-0.3	1.8
1175.000	900.	-2.0	-0.7	1.3
1225.000	950.	-1.4	-0.7	1.3
1296.000	1021.	-5.0	-0.4	0.6
1346.000	1071.	-5.0	-0.4	0.6
1396.000	1121.	-5.0	-0.4	0.6
2365.000	2090.	-1.5	-0.4	0.7
2415.000	2140.	-1.5	-0.4	0.6
2465.000	2190.	-0.9	-0.2	0.6
2554.000	2279.	-0.5	-0.1	0.3
2604.000	2329.	-1.4	-0.4	0.7
2654.000	2379.	-1.5	-0.4	0.7
2960.000	2670.	-1.1	-0.3	0.6
3010.000	2720.	-1.1	-0.3	0.6
3060.000	2770.	-0.9	-0.2	0.6
3120.000	2830.	-1.1	-0.2	0.4
3170.000	2880.	-1.1	-0.2	0.4
3220.000	2930.	-1.1	-0.2	0.4
3260.000	2970.	-1.1	-0.2	0.4
3310.000	3020.	-1.1	-0.2	0.4
3360.000	3070.	-0.9	-0.3	0.5
3512.000	3222.	-0.8	-0.3	0.5
3562.000	3272.	-0.8	-0.2	0.5
3612.000	3322.	-0.8	-0.3	0.5
WEIGHTED AVG FOR REACH		-2.0	-0.4	0.9

FHF FOR THE REACH = 020 WITH 49.1% OF THE REACH WITHIN 1.0 FEET ZONE FOR THE REACH = A 4

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	AVG ELEVATION DATA			WTD. AVG.	FHF	PERCENT WITHIN
		10f	1f	DIFF.			
	0.						
					SEC.	275.000	
1	100.	648.9	650.7	-1.7	-1.7	015	100.
2	200.	650.5	652.2	-1.7	-1.7	015	100.
3	300.	652.0	653.7	-1.7	-1.7	015	100.
4	400.	653.5	655.2	-1.7	-1.7	015	100.
5	500.	655.1	656.7	-1.6	-1.7	015	100.
6	600.	656.6	658.2	-1.6	-1.7	015	100.
7	700.	658.1	659.7	-1.6	-1.7	015	100.

5	500.	655.1	656.7	-1.6	-1.7	015	100.
6	600.	656.6	658.2	-1.6	-1.7	015	100.
7	700.	658.1	659.7	-1.6	-1.7	015	100.
8	800.	659.7	661.2	-1.6	-1.6	015	100.
9	850.					SEC.	1125.000
	900.	661.1	662.9	-1.7	-1.7	015	100.
	900.					SEC.	1175.000
	950.					SEC.	1225.000
10	1000.	665.1	667.8	-2.7	-1.8	020	90.
	1021.					SEC.	1296.000
	1071.					SEC.	1346.000
11	1100.	668.4	673.4	-5.0	-2.1	020	91.
	1121.					SEC.	1396.000
12	1200.	668.7	673.6	-4.9	-2.3	025	83.
13	1300.	669.5	674.1	-4.6	-2.5	025	77.
14	1400.	670.4	674.6	-4.2	-2.6	025	57.
15	1500.	671.3	675.1	-3.8	-2.7	025	33.
16	1600.	672.2	675.7	-3.5	-2.7	025	25.
17	1700.	673.1	676.2	-3.1	-2.7	025	24.
18	1800.	674.0	676.7	-2.7	-2.7	025	26.
19	1900.	674.9	677.3	-2.4	-2.7	025	37.
20	2000.	675.8	677.8	-2.0	-2.7	025	50.
	2090.					SEC.	2365.000
21	2100.	676.8	678.5	-1.6	-2.6	025	57.
	2140.					SEC.	2415.000
	2190.					SEC.	2465.000
22	2200.	681.0	681.9	-0.9	-2.6	025	68.
	2279.					SEC.	2554.000
23	2300.	683.4	684.3	-0.9	-2.5	025	70.
	2329.					SEC.	2604.000
	2379.					SEC.	2654.000
24	2400.	687.0	688.5	-1.5	-2.4	025	67.
25	2500.	688.7	690.0	-1.4	-2.4	025	64.
26	2600.	691.3	692.6	-1.2	-2.4	025	65.
	2670.					SEC.	2960.000
27	2700.	694.6	695.7	-1.1	-2.3	025	63.
	2720.					SEC.	3010.000
	2770.					SEC.	3060.000
28	2800.	703.1	704.0	-0.9	-2.3	025	61.
	2830.					SEC.	3120.000
	2880.					SEC.	3170.000
29	2900.	707.7	708.8	-1.1	-2.2	020	62.
	2930.					SEC.	3220.000
	2970.					SEC.	3260.000
30	3000.	707.8	708.8	-1.1	-2.2	020	60.
	3020.					SEC.	3310.000
	3070.					SEC.	3360.000
31	3100.	710.7	711.6	-0.9	-2.1	020	58.
32	3200.	711.9	712.7	-0.9	-2.1	020	59.
	3222.					SEC.	3512.000
	3272.					SEC.	3562.000
33	3300.	713.2	714.0	-0.8	-2.1	020	58.
	3322.					SEC.	3612.000

THIS REACH CAN BE SUBDIVIDED BY INC NO. TO MEET FIA REQUIREMENTS  
INPUT 204 WHERE N IS THE NUMBER OF REACHES AND THEN INPUT THE END  
OF EACH REACH BY INC NO. FOR EXAMPLE 202 12 33  
A NEGATIVE INC NO. WILL SUPPRESS INTERMEDIATE INC OUTPUT.

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HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977  
ERROR CORR - 01  
MODIFICATION - 50,51,52  
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MAK RMAKS2 15-PAGES 727-LINES 0-PLOTS # RTI.A25.P03078

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