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 HEC2 VERSION UPDATED JAN 1975  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08  
 MODIFICATIONS 52,53,54,55,56,57,58  
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T1 TRIBUTARY 13 BASIN 4  
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855  
 T3 100 YEAR FLOODWAY

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-10.	6.	0.	0.	0.0	0.0	0.0	0.	0.0	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300  
 2800 NAT Q1= 38.72 WSEL= 295.51 ENC Q1= 46.35 WSEL= 296.51 RATIO= -0.1970  
 NAT Q1= 98. RATIOS LOB,CH,ROB= 0.4925 0.4746 0.0329 WSEL= 296.51  
 2096 WSEL NOT GIVEN,AVG OF MAX,MIN USED  
 3280 CROSS SECTION 2200.00 EXTENDED 49825.85 FEET

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

3470 ENCROACHMENT STATIONS=	1423.0	1440.0	TYPE=	4	TARGET=	0.525
2200.00 49854.75 50145.25	0.0	295.51 50145.25	0.00	0.0	0.0	294.90
1125. 0. 1125.	0.	18. 847508.	49.	0.	0.	295.30
0.0 0.00 0.00	0.00	0.085 0.060	0.085	0.0	290.50	1423.00
0.000000 2200. 2200.	2204.	0 0	1	0.0	17.00	1440.00

2800 NAT Q1= 25.72 WSEL= 339.27 ENC Q1= 28.74 WSEL= 340.27 RATIO= -0.1176  
 NAT Q1= 49. RATIOS LOB,CH,ROB= 0.3754 0.5912 0.0334 WSEL= 340.27  
 3280 CROSS SECTION 5200.00 EXTENDED 49790.85 FEET

3470 ENCROACHMENT STATIONS=	1161.0	1174.0	TYPE=	4	TARGET=	0.409
5200.00 49809.55 50145.25	0.0	339.27 50145.25	0.00	0.00	0.00	337.20
1125. 0. 1125.	0.	18. 647516.	49.	51486.	1.	339.20
479.67 0.00 0.00	0.00	0.085 0.060	0.085	0.060	335.70	1161.00
0.000000 3000. 3000.	3000.	16 0	1	0.0	13.00	1174.00

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T1 TRIBUTARY 13 BASIN 4  
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855  
 T3 500 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	5.	0.	0.	0.010000	0.0	0.0	0.	297.000	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
	4.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
2200.00	7.16	297.66	0.0	297.00	297.97	0.32	0.0	0.0	294.90
2200.	1422.	669.	109.	465.	99.	38.	0.	0.	295.30
0.0	3.06	6.76	2.86	0.085	0.060	0.085	0.0	290.50	1196.01
0.009994	2200.	2200.	2204.	0	0	5	0.0	262.90	1458.92

3301 HV CHANGED MORE THAN HVINS

5200.00	6.75	342.43	342.12	0.0	343.71	1.28	45.44	0.29	337.20
2200.	966.	946.	288.	148.	80.	57.	31.	12.	339.20
0.10	6.52	11.83	5.06	0.085	0.060	0.085	0.060	335.70	1113.66
0.025624	3000.	3000.	3000.	15	15	1	0.0	86.50	1200.15

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T1 TRIBUTARY 13 BASIN 4  
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855  
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.010000	0.0	0.0	0.	295.000	0.0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	3.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
2200.00	6.18	296.68	0.0	295.00	296.97	0.29	0.0	0.0	294.90
1125.	591.	492.	41.	258.	82.	21.	0.	0.	295.30
0.0	2.29	5.98	2.01	0.085	0.060	0.085	0.0	290.50	1226.52
0.009988	2200.	2200.	2204.	0	0	5	0.0	230.62	1457.15

3301 HV CHANGED MORE THAN HVINS

5200.00	5.27	340.97	340.73	0.0	341.92	0.95	44.75	0.20	337.20
1125.	454.	592.	80.	86.	61.	24.	18.	10.	339.20
0.11	5.26	9.69	3.33	0.085	0.060	0.085	0.060	335.70	1123.27
0.024651	3000.	3000.	3000.	13	15	1	0.0	70.16	1193.43

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T1 TRIBUTARY 13 BASIN 4  
 T2 FLOOD STUDY AT WAKE COUNTY NC M-6 JOB NO. 6855 JW APRIL 1976  
 T3 50 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.010000	0.0	0.0	0.	294.000	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
2200.00	5.81	296.31	0.0	294.00	296.60	0.29	0.0	0.0	294.90
825.	369.	433.	23.	186.	76.	14.	0.	0.	295.30
0.0	1.98	5.71	1.62	0.085	0.060	0.085	0.0	290.50	1238.79
0.010145	2200.	2200.	2204.	0	0	5	0.0	217.67	1456.46

3301 HV CHANGED MORE THAN HVINS

5200.00	4.74	340.44	340.19	0.0	341.26	0.82	44.50	0.16	337.20
825.	316.	474.	35.	67.	54.	14.	14.	10.	339.20
0.12	4.72	6.77	2.49	0.085	0.060	0.085	0.060	335.70	1126.82
0.023722	3000.	3000.	3000.	13	15	1	0.0	64.13	1190.95

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

10 YEAR FLOOD WATER SURF

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH
2200.00	2200.00	0.0	0.0	290.50	390.00	295.51	38.72	295.83	155.76	0.0	0.0	5.01
5200.00	3000.00	0.0	0.0	335.70	390.00	339.27	25.72	339.86	41.19	0.0	0.0	6.93

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
2200.000	390.000	295.510	0.0	0.0	0.0	155.765	0.0	2200.000
5200.000	390.000	339.272	0.0	43.763	0.0	41.188	0.0	3000.000

DATA FOR LAST CROSS SECTION PROFILE

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.0	0.0	6.782	0.0

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 YEAR FLOODWAY

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH
2200.00	2200.00	0.0	0.0	290.50	1125.00	296.68	112.57	296.97	230.62	0.0	0.0	5.98
2200.00	2200.00	0.0	0.0	290.50	1125.00	297.68	112.94	298.18	64.01	1380.65	1444.66	6.75
5200.00	3000.00	0.0	0.0	335.70	1125.00	340.97	71.65	341.92	70.16	0.0	0.0	9.69
5200.00	3000.00	0.0	0.0	335.70	1125.00	341.18	73.09	342.22	51.00	1142.00	1193.00	9.78

  

SECTION NUMBER	DISCHARGE (CFS)	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
A 2200.000	1125.000	296.683	0.0	0.0	0.0	230.621	0.0	2200.000
2200.000	1125.000	297.680	0.997 ✓	0.0	0.0	64.014	166.607	2200.000
B 5200.000	1125.000	340.970	0.0	44.287	0.0	70.161	0.0	3000.000
5200.000	1125.000	341.182	0.211 ✓	43.502	0.0	50.999	19.162	3000.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.0	0.0	10.358	0.0
2	1.000	51.000	3.960	-6.397

*use 0' ENCR.*

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T1 TRIBUTARY 13 BASIN 4  
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855  
 T3 100 YEAR FLOODWAY

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	6.	0.	0.	0.0	0.0	0.0	0.	297.680	0.0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300  
 2800 NAT Q1= 112.57 WSEL= 296.68 ENC Q1= 112.57 WSEL= 297.68 RATIO= 0.0

NAT Q1= 223, RAYIOS LOB,CH,ROB= 0.6485 0.3017 0.0498 WSEL= 297.68

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

3470 ENCROACHMENT STATIONS= 1380.6 1444.7 TYPE= 4 TARGET= 0.496

2200.00	7.18	297.68	0.0	296.68	298.18	0.50	0.0	0.0	294.90
1125.	421.	670.	34.	120.	99.	11.	0.	0.	295.30
0.0	3.50	6.75	3.08	0.085	0.060	0.085	0.0	290.50	1380.65
0.009922	2200.	2200.	2204.	0	0	1	0.0	64.01	1444.66

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1142.0 1193.0 TYPE= 1 TARGET= 51.000

5200.00	5.48	341.18	340.78	0.0	342.22	1.04	43.88	0.16	337.20
1125.	403.	623.	100.	67.	64.	26.	13.	4.	339.20
0.11	6.05	9.78	3.59	0.085	0.060	0.085	0.060	335.70	1142.00
0.023692	3000.	3000.	3000.	14	19	1	0.0	51.00	1193.00





SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHOPD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH
27469.00	50.00	274.30	269.20	262.20	1000.00	268.73	60.68	270.15	16.00	0.0	0.0	9.58
27519.00	50.00	0.0	0.0	262.80	1000.00	270.37	374.80	270.39	257.17	0.0	0.0	2.08
SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH				
1000.000	3000.000	189.753	0.0	0.0	0.0	665.212	0.0	1000.000				
3550.000	3000.000	193.866	0.0	4.113	0.0	459.552	0.0	2550.000				
3600.000	3000.000	193.913	0.0	0.047	0.0	100.775	0.0	50.000				
3639.000	3000.000	193.936	0.0	0.023	0.0	100.891	0.0	39.000				
3689.000	3000.000	194.292	0.0	0.356	0.0	459.812	0.0	50.000				
6109.000	2950.000	200.171	0.0	5.879	0.0	1243.479	0.0	2420.000				
7859.000	2900.000	203.434	0.0	3.263	0.0	586.934	0.0	1750.000				
7909.000	2900.000	203.218	0.0	-0.216	0.0	115.040	0.0	50.000				
7939.000	2900.000	203.249	0.0	0.031	0.0	115.238	0.0	30.000				
7989.000	2900.000	204.119	0.0	0.869	0.0	560.926	0.0	50.000				
9909.000	2900.000	208.337	0.0	4.219	0.0	291.469	0.0	1920.000				
12109.000	2800.000	212.678	0.0	4.341	0.0	489.167	0.0	2200.000				
15609.000	2200.000	222.262	0.0	9.583	0.0	372.616	0.0	3500.000				
16559.000	2150.000	225.197	0.0	2.935	0.0	298.890	0.0	950.000				
16609.000	2150.000	225.321	0.0	0.124	0.0	87.838	0.0	50.000				
16645.000	2150.000	225.336	0.0	0.015	0.0	87.935	0.0	37.000				
16696.000	2150.000	225.808	0.0	0.473	0.0	361.494	0.0	50.000				
19116.000	2100.000	231.253	0.0	5.444	0.0	909.327	0.0	2420.000				
20116.000	1900.000	234.077	0.0	2.824	0.0	494.205	0.0	1000.000				
23616.000	1100.000	248.306	0.0	14.229	0.0	178.284	0.0	3500.000				
25116.000	1100.000	254.168	0.0	5.862	0.0	258.042	0.0	1500.000				
26066.000	1100.000	261.271	0.0	7.107	0.0	104.951	0.0	950.000				
26116.000	1100.000	261.919	0.0	0.648	0.0	35.000	0.0	50.000				
26144.000	1100.000	261.940	0.0	0.021	0.0	35.000	0.0	28.000				
26194.000	1100.000	262.329	0.0	0.389	0.0	138.560	0.0	50.000				
26919.000	1100.000	266.958	0.0	4.639	0.0	200.309	0.0	725.000				
27369.000	1000.000	269.028	0.0	2.060	0.0	231.578	0.0	450.000				
27419.000	1000.000	268.167	0.0	-0.860	0.0	16.000	0.0	50.000				
27469.000	1000.000	268.726	0.0	0.558	0.0	16.000	0.0	150.000				
27519.000	1000.000	270.365	0.0	1.639	0.0	257.165	0.0	50.000				

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

10 YEAR FLOOD WATER SURF

1	SECTION	CHANNEL	MIN EL OF	MAX EL OF	MIN EL	DISCHARGE	CWSEL	TO	EG	TOPWID	STENCL	STENCR	VCH	1
2	NUMBER	LENGTH	ROADWAY	LOW CHRD	GROUND	(CFS)								2
3	1000.00	1000.00	0.0	0.0	181.90	3000.00	189.75	950.23	189.79	665.21	0.0	0.0	2.40	3
4	3550.00	2550.00	0.0	0.0	184.50	3000.00	193.87	525.32	194.05	459.55	0.0	0.0	4.87	4
5	3600.00	50.00	0.0	0.0	185.40	3000.00	193.91	511.34	194.27	100.78	0.0	0.0	4.78	5
6	3639.00	39.00	202.00	200.60	185.40	3000.00	193.94	514.01	194.25	100.89	0.0	0.0	4.76	6
7	3689.00	50.00	0.0	0.0	184.90	3000.00	194.29	532.63	194.47	459.81	0.0	0.0	4.81	7
8	6109.00	2420.00	0.0	0.0	193.20	2950.00	200.17	639.17	200.22	1243.47	0.0	0.0	3.14	8
9	7859.00	1750.00	0.0	0.0	194.80	2900.00	203.43	661.28	203.51	586.93	0.0	0.0	3.44	9
10	7909.00	50.00	0.0	0.0	194.10	2900.00	203.22	262.78	203.89	115.04	0.0	0.0	6.57	10
11	7939.00	30.00	207.30	206.20	194.10	2900.00	203.25	265.55	203.91	115.24	0.0	0.0	6.52	11
12	7989.00	50.00	0.0	0.0	195.00	2900.00	204.12	502.55	204.25	560.93	0.0	0.0	4.27	12
13	9909.00	1920.00	0.0	0.0	197.80	2900.00	208.34	742.22	208.42	291.47	0.0	0.0	3.52	13
14	12109.00	2200.00	0.0	0.0	204.30	2800.00	212.68	536.58	212.80	489.17	0.0	0.0	4.48	14
15	15609.00	3500.00	0.0	0.0	214.30	2200.00	222.26	418.29	222.41	372.62	0.0	0.0	4.51	15
16	16559.00	950.00	0.0	0.0	216.60	2150.00	225.20	351.88	225.48	298.89	0.0	0.0	5.34	16
17	16609.00	50.00	0.0	0.0	216.50	2150.00	225.32	264.03	225.77	87.84	0.0	0.0	5.39	17
18	16646.00	37.00	229.80	228.80	216.60	2150.00	225.34	265.26	225.78	87.93	0.0	0.0	5.37	18
19	16696.00	50.00	0.0	0.0	216.80	2150.00	225.81	422.55	226.00	361.49	0.0	0.0	4.61	19
20	19116.00	2420.00	0.0	0.0	222.30	2100.00	231.25	494.01	231.33	909.33	0.0	0.0	4.42	20
21	20116.00	1000.00	0.0	0.0	227.40	1800.00	234.08	246.02	234.20	494.20	0.0	0.0	4.15	21
22	23616.00	3500.00	0.0	0.0	238.20	1100.00	248.31	208.78	248.43	178.28	0.0	0.0	3.11	22
23	25116.00	1500.00	0.0	0.0	248.30	1100.00	254.17	142.20	254.34	258.04	0.0	0.0	5.09	23
24	26066.00	950.00	0.0	0.0	253.70	1100.00	261.27	106.28	261.92	104.85	0.0	0.0	7.32	24
25	26116.00	50.00	0.0	0.0	255.40	1100.00	261.92	142.21	262.35	35.00	0.0	0.0	5.26	25
26	26144.00	28.00	266.50	264.80	255.40	1100.00	261.94	142.93	262.37	35.00	0.0	0.0	5.24	26
27	26194.00	50.00	0.0	0.0	253.50	1100.00	262.37	158.77	262.64	139.56	0.0	0.0	5.38	27
28	26919.00	725.00	0.0	0.0	261.30	1100.00	266.97	116.77	267.27	200.31	0.0	0.0	5.96	28
29	27369.00	450.00	0.0	0.0	262.60	1000.00	269.02	214.09	269.10	231.58	0.0	0.0	3.20	29
30	27419.00	50.00	0.0	0.0	262.20	1000.00	268.17	53.72	269.87	16.00	0.0	0.0	10.47	30